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THE MACDONALD LASSIE
A. R. WOODS



Success — Spelled "B-E-T-T-E-R F-O-R-A-G-E"

The future success of most Eastern Canadian farmers rests as much on forage crops as on any other single factor. Those who recognize this, and govern their operations accordingly, will come out on top. As for the others, in time they will be forced out of farming — and the time may not be too long.

To guide those who want to keep going, this number of the Journal contains three articles dealing with forage — one written by an agronomist, one by a nutritionist and one by an agricultural engineer. Together, they present quite a clear outline of what farmers can do to meet present conditions.

The fact is that sliding prices and narrowing markets have left Canadian farmers with two simple alternatives — to produce more cheaply, or accept a lower standard of living. The second alternative is not very palatable to most of us; but luckily, there is some chance of escaping it. There are few farms in this country that could not cut their costs of production through a little reorganization of their programs.

The greatest single outlay on most Eastern Canadian farms is for feed; and this outlay can be cut by producing more feed on the home farm. In this grassland country that means getting more feed from our forage crop acreage — which is quite possible on most farms.

It may be done by improving the soil's ability to grow plants, through draining, manuring, liming and fertilizing as needed. It may be done by using varieties and mixtures that will produce a greater yield of more nutritious forage. It may be done by organizing the farm program so that these forage crops will yield the highest possible feeding value over the year.

This means that crops must be harvested when their feeding value is at its peak — which involves considerable planning. The plans need to consider the ways in

which the forage will be used — how much for pasture, hay, ensilage — and the varieties and mixtures which will fit best into this framework, to suit climatic conditions and to spread the work.

There are varieties of forage plants to fit almost every conceivable set of conditions — dry or wet land, various types of soil and many sets of climatic conditions. Some of these varieties reach their peak early in the season, some in the middle, and some late. Through studying the characteristics of each variety and using a mixture that fits the soil and climatic conditions in his region, a farmer can take much of the gamble out of haying.

Still more can be taken out by organizing the farm program so that the forage does not all need to be taken off at once. That cuts down loss from weathering, and lowers the labour needs.

The work can be cut still further through the use of modern equipment. And its labour-saving qualities are not the only merits of this equipment. By making it possible to put up much more forage in the same time it further reduces weathering losses, and results in more nutritious feed.

The time is gone when we could regard hay as simply hay. Now we know that it may be very high in feeding value, or very low, depending on the varieties it contains and the way it has been handled. Our future progress will depend on how well we apply this knowledge.

Our Cover Picture

A haying scene in March? A little early, perhaps, but it won't be long before such scenes are common all over the province. Photo by W. E. Whitehead.

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Ensiling a grass-legume mixture at the Lennoxville Experimental Farm.

Planning for Farm Forage

To keep costs down, the farm program needs to be carefully organized. Here is a discussion on the use of forage in various forms, showing how each use can best be fitted in. It suggests that, while not everything can be done at once, it should be all planned together.

by L. C. Raymond

THE cost of producing agricultural products, which is always one of the most important factors in farm management, has — due to recent developments in the price structure — taken on a new significance. The prices of dairy and meat products are either down at present or are tending in that direction, while the cost of practically all the materials and labour which go into the production of these commodities has not fallen nearly as far.

Such variations which are hard to avoid in the complex structure of world trade, are extremely difficult for the producer to meet. In contrast with prices — which may change suddenly — farm practice must change slowly. With a reasonable degree of diversification on a farm, the emphasis can be changed on the revenue sources but at best this is relatively slow. Agricultural producers must, therefore, take a long point of view, seeking to keep the cost of production at the lowest possible point.

Eastern Canada has for many years depended increasingly on the grain products of the west to meet

deficiencies in the forage supply of her farms. Over the period 1942-47, Eastern Canada purchased in grain and grain products some two and three quarter million tons, of which the province of Quebec used slightly over one million tons. During and immediately following these war years such imports were probably quite justified, but we should ask ourselves whether this practice can be expected to continue indefinitely, from either the eastern or western point of view.

Previous to the war the position of the farm forage supply in European countries was essentially similar to that in Eastern Canada. Grain products, from various surplus areas, were imported to balance the farm ration. Due to greatly increased initial costs, plus transportation, the delivered prices of such products in the European field have become prohibitive and other means of supplying feed needs have had to be found. So to dairy farmers this has meant concentrating attention on three things: (a) Improving the quality of hay stored, largely by time of cutting, but to some extent by handling. (b) The introduction of grass silage. (c) High fertility rotational pastures.

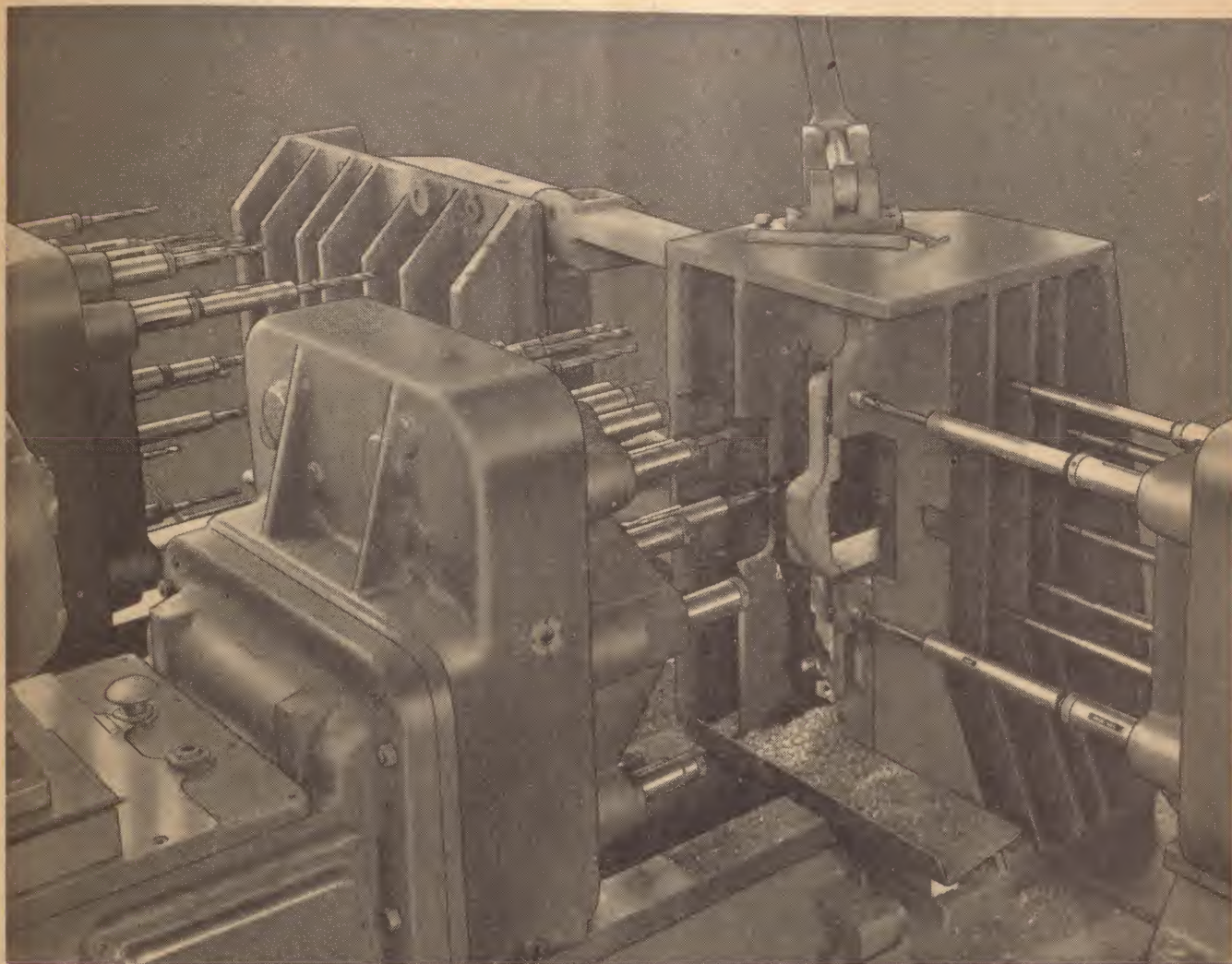
The Eastern Canadian farmer has not yet reached the same position as his European counterpart, but he is certainly approaching it. The answer seems most likely to be found in substantially the same way. The average price of grain products to the eastern farmer has some

what more than doubled over the ten years before the war. We have not been doing a good job of conserving, for winter feed, the forage crops which our farms produce and we have not taken full advantage of cheaper production through the development of good summer grazing areas. Admittedly seasons, situations and opportunities vary tremendously, but cheapening the cost of production is most likely through the three phases of our forage supply mentioned. What can we do about them?

Hay of High Feed Value

Haymaking is one of the main summer undertakings on a farm. It represents one of the peaks for labour. In most parts of the east the optimum harvesting season is short since the crops mature very rapidly in the hot July period. If quality hay is to be produced one of the first requisites is to harvest before the crop is too mature. Coupled very closely with this is the fact that the less mature the crop the more difficult and hazardous it is to attempt to convert it into dry hay by conventional methods. Many a valuable crop of clover has been cut early, only to be ruined in a very unfavourable period of weather.

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The only plausible solution would seem to be the institution of methods other than field curing to deal with at least a part of the crop ordinarily dried. The new-seeding hay, which is mostly legume, is the most difficult to handle. Grass silage to handle this part of the hay problem seems the best solution. More will be said about this later.

Other methods of handling high quality fodder have been and are still being worked with. Mow-drying is one of these but it does not seem to have been too generally accepted, chiefly because the quality of the final product is not high enough to warrant the expense. Immediate drying, particularly in European countries, is still being actively experimented with. Trials in this country have not given results commensurate with the cost.

Ensiling the part of the crop that is most difficult to dry, at a time just before the normal haying period the last part of June — seems the best plan to work on. With this part of the crop out of the way the hay that is more largely grass may be cut promptly and with much less hazard. The over-mature crop is still the greatest cause of low quality fodder.

Grass Silage

Storing some of our highest quality hay, such as the product from our new meadows, as grass silage is becoming increasingly common. Two things stand in the way of more rapid adoption. The first of these is the cost of the machinery which is required to take care — in part at least — of the heavy work in making silage. The second is the silo situation on the average farm. Most farms are equipped with one medium to large silo. One silo will not be enough if it is desired to put up both corn and grass silage. The latter is made in June and the former in September. It is a wasteful practice to partly fill a silo with grass in June and then complete it with corn in the fall. Perhaps a third reason should be added, one needs to use more care with grass silage than with corn. Preservatives of some sort are usually essential, particularly where early cut high quality silage is desired.

Admittedly all three of these are difficulties which must be overcome. Great strides have been made in the machinery designed to handle grass silage. These are recorded elsewhere in this issue. The more advanced machinery is expensive but the savings which it effects are great. A complete forage harvester can be used for both grass and corn. Partner ownership would cut the cost at least in half, and such a machine could easily take care of two farms. If really high grade forage is stored the equipment should pay for itself in a comparatively short time both from the standpoint of labour saving and the reduction in the quantity of concentrates purchased.

It has been the experience with many of those who have been making grass silage for some time that stock will eat more of it and less long hay, with better results at the milk pail. Many farmers have now resorted to an



Paul Gervais inspects a thick stand of Dollard red clover.

additional silo — somewhat smaller than the existing silo. While the operator is becoming familiar with grass silage making, the smaller one is used for grass and the larger one for corn. In later years the position may be reversed, and the larger silo used for grass.

The traditional set-up of farm barns is unsatisfactory where grass silage and baled hay are to be stored. From the standpoint of space occupied, silage is the most economical way to store forage. Baled hay takes much less space than long hay. Barns that have been built in the last five or ten years have been radically altered in design to suit the modern trend in forage storing.

Grass silage has had most of the kinks taken out of it in the past ten years. Some farmers are storing mixed legume hay without any preservative. While this can be done, the beginner is strongly advised to use a reasonable amount of preservative until the operation is completely under control.

More and more evidence is indicating the real value of high quality grass silage in reducing the quantity of concentrates that must be purchased. No one can clearly foresee the future, but the trends are clearly in the direction of higher prices for concentrates relative to the price of animal products, whether meat or milk. Getting equipped with the things needed to permit economical production of high quality grass silage is a good hedge against the day when the return for animal products may be still more out of line with the price of purchased feeds.

Quality Pastures

Space will permit only brief reference to the need for high quality pastures. Much has already been written on this subject and real progress is being made. For the man who is located in the milkshed of a city of any size, good pastures can justify any reasonable expenditure. The cheapest milk that can be produced comes when cows are on pasture. Where the midsummer drought is prevalent a well managed pasture area abundantly justifies itself.

Farms differ greatly in their pasture needs and in the location of fields suitable for pasture. Natural pastures in sections having abundant rainfall will — with proper fertilization — respond well and may supply the necessary grazing. In drier sections more radical treatments are required to insure sufficient pasturage. The best solution for the latter is a short term pasture which can be grazed rotationally and where suitable management can be employed, i.e., good fertilization, clipping uneaten grasses, distribution of droppings, and use of the bigger, more productive grasses and legumes. The proper location of such a scheme in relation to the farm barns will vary from farm to farm but the site chosen is of the utmost importance.

If all three points mentioned can be put in proper focus, a great step will have been taken to insure cheaper production. Good hay, high quality grass silage and productive pastures represent at present the best approach to good forage crop management. We cannot expect to accomplish all of these steps at once, but they should be planned for. These are uncertain times on a farm; and every opportunity must be grasped if we are to keep the income in line with the cost of production.



This mixture of 8 lbs. timothy, 4 lbs. red clover, 4 lbs. alfalfa and 2 lbs. Ladino produced a lot of good feed at Lennoxville, even in the dry summer of 1949.

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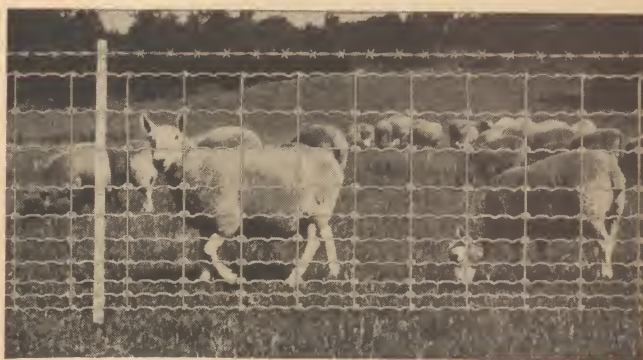


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Saving Money with Forage



High-producing Jerseys on pasture at Campburn Farm, owned by Chas. Robison & Sons, Harvey Station, N.B.

by G. C. Ashton

FOLLOWING domestication of cattle, sheep and horses one of man's chief responsibilities was the provision of suitable grazing for his animals. History is full of tales of combat between neighbours, tribes and nations who fought for grass for their flocks and herds.

In those early days, and even until comparatively recently, feeding livestock was quite a simple matter. Production of meat and milk was not nearly so intensive as today, so that feed was used by animals chiefly for reproduction, growth and body repair. Today the needs for production are frequently as exacting as those for reproduction. Vitamins and trace minerals as well as protein and energy are of concern to the feeder today in his efforts to provide adequate rations under present day conditions of depleted soils and intensive animal production — particularly milk production.

The most natural feed for dairy cattle is forage in one form or another, because of their ruminant stomach. Good quality forage is well-suited to their nutrient requirements since it contains abundant protein, adequate minerals unless grown on deficient soils, the necessary vitamins with the exception of possibly vitamin D, and sufficient energy for reasonably high production. But to get the highest possible production, forage crops need some energy supplementation.

If it were possible to choose, the most desirable form in which to supply forage to the animals would be as pasture, throughout the entire year. But in Canada, if forage crops are to be used for feed during the non-growing season, some provision must be made for preservation of these materials over an extended period of time.

All the ways of preserving forage crops present certain difficulties and permit of serious losses under adverse con-

With good forage farmers can reduce or eliminate purchases of costly protein supplements and cut down the amount of grain needed. This article tells just what makes good forage, and how it may best be used.

ditions. Rainy weather during field curing of hay causes large losses of nutrients in the harvested material. While ensiling grass products is usually an efficient means of conserving the nutrients, the use of improper methods sometimes results in a product of low feeding value. Even the feed value of pasture swards decreases markedly with the onset of hot, dry weather under natural conditions.

Pasture

An outstanding feature of a productive pasture is that it represents the most important source of highly nutritious fodder for livestock in a relatively cheap and very convenient form. This is particularly true of protein, as immature herbage plants contain a large amount of this nutrient so essential for growing animals and for milk production. The feed value of pasture varies less than any other herbage product used for livestock feeding although it does, at times, reach extremely low values — for example, under conditions of drought or maturity. Herbage from pastures well-managed and grown on fertile soil is the nearest product there is to an ideal single feedstuff for most farm livestock.

No single feedstuff has an adequate balance of all nutrients. The chief imbalance of pasture is a shortage of energy, compared to its protein content. This is the chief factor that limits the use of pasture for market hogs, hard working horses, and very high producing dairy cows.

Good pasture provides adequate amounts of protein, the minerals, calcium and phosphorus usually, and the necessary vitamins. There is no vitamin D in plants, but since sunlight is an effective substitute for vitamin D its requirements are taken care of indirectly when the animals are on pasture. The minor mineral elements such as iron, copper and cobalt may be deficient in certain districts. When such shortages do exist they may be made good by feeding the necessary quantities along with the salt which should always be supplied as an extra.

Harvested Forage

Year-round feeding of livestock in our climate requires that some provision be made to store a sufficient quantity of feed to last until a new crop can be produced. With forage crops this presents a number of serious problems. Any program of feeding which involves the handling of the material and a time lapse between harvesting and feeding, automatically provides an opportunity for nutrient loss, either as a result of handling or storage, or both. Thus if one has been successful in producing a

crop with high feeding value one's ultimate goal has not been attained unless this nutritious material is made available to the animal's digestive system unaltered in composition.

For any harvested forage to have high feeding value it must have a high proportion of leaves to stems; a bright color — greenish rather than yellow or brown; a reasonably fine texture — few coarse stems; and be free from brush or trash.

When the forage is put in as silage seldom will these characteristics fail to be met. The reasons for this will be evident from the comments to follow.

With forage saved for hay a product with the above characteristics is likely to be high in nutritive value as shown by a high proportion of protein; a minimum of crude fibre; a high content of total sugars; abundant provitamin A; and fair amounts of phosphorus and calcium.

The important factors which determine whether or not the stored hay will have the above characteristics are degree of maturity of the hay plants when cut; losses occurring during curing operations either mechanical — leaves falling off or leaching while curing; and fermentation during storage.

Hay plants decline rapidly in their content of nutrients once the blossom stage is reached. Any increase in tonnage after this stage of maturity is reached is largely made up of fibre, which is poorly digested.

Cutting Time

The maturity of the plant at time of cutting exerts a great influence on hay feed value because it has a direct bearing on the ratio of leaf to stem in the living plant, and hence in the hay cut from it. The leaf portions of plants are invariably higher in feed value than are the stem portions. In alfalfa, for example, the leaves supply four times as much usable protein, twice as much digestible nitrogen-free-extract, and a third more total digestible nutrients than do the stems. Thus any method of harvesting, handling and storing that increases the proportion of leaves to stems in the hay will markedly improve its feeding value.

Leaching

Leaching can be a source of great loss of nutrients from hay. Experimental results indicate that as much as 65% of the minerals, 35% of the carbohydrates and 18% of the protein of hay crops as cut may be lost if the material gets rained on while curing. Such losses are serious in themselves; but the fact that no fibre is lost at this time has the effect of increasing the proportion of this substance in the harvested hay and further lowering its feeding value.

Here it may be noted that haymakers in Eastern Canada find themselves in the unfortunate situation of having the ideal cutting time for hay coincide with poor curing weather. The frequent showers which are conducive to good growth of the hay plants are not helpful from the

(Continued on Page 8)

The Royal Scores Again

The third edition of the Macdonald Royal was run off with clock-like precision on the last day of February. Entirely a student enterprise, it featured a day-long livestock show, exhibits planned and prepared by the different "options", which, using the theme "Better Living Through Science", demonstrated the relation between science and agriculture, homemaking and teaching. The exhibition booths, set up in the Women's Gymnasium, represented many hours of careful work and attention to detail, and were planned to show the type of work involved in the many branches of specialization in agriculture which are offered by the College. In the opinion of the judges, the booth of the students in Plant Pathology, who had elected to show the causes and means of control of apple scab, fulfilled most clearly the objectives of the exhibition.

The School for Teachers, in a separate exhibition room, displayed the results of their week of project work, with some really fine exhibits of the latest modes of teaching young children.

The Royal, which attracted hundreds of visitors from the surrounding districts, was officially opened by Mr. Kenneth Cox, Principal of the Nova Scotia Agricultural College, who later, just before the presentation of the Green and Gold Revue, presented trophies to winners in the judging contests.

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standpoint of curing. Furthermore, as soon as drier, warmer air arrives, the plants cease their production of new leaves and direct their activity to increasing the size of their stems and the production of seeds.

Good quality hay and grass silage can be used to supply a major portion of the dairy cow ration. While such products will not supply sufficient total digestible nutrients for very high producing cows to reach their inherited milking capacity, forage products can supply all of the necessary protein requirements for such animals. Thus the

protein supplement problem in dairy cow feeding becomes one of quality of the hay or other roughage available for feeding.

When high quality forage is fed to dairy cows the protein and energy requirements for milk production can be met satisfactorily with the aid of only farm grains; but if poor quality roughage is used, farm grains need to be supplemented with protein to meet milk production requirements. The situation is summarized in the following table:

Roughage combinations	Approx. % total protein in roughage	Min. % total protein needed in meal mix	Combination of meal mixture
Alfalfa and clover hay	10 or more	less than 12	Farm grains
Clover hay 1 lb. and corn silage 3 lb. per 100 lb. bodyweight	9	14	Farm grains 90 Oilmeal 10
Timothy hay, immature	10	less than 12	Farm grains
Average timothy or grass hay	6	18	Farm grains 75 Oilmeal 25
Timothy hay 1 lb. and grass silage 3 lb. per 100 lb. bodyweight	10	less than 12	Farm grains

Getting the Most from Fertilizers

Fertilizer may be applied for crops by a number of different methods or a combination of two or more methods. No one method, however, will be practical or suit the requirements of all crops under varied soil and climatic conditions.

Applying fertilizer with the conventional potato planter is the most effective method yet tested for potatoes. Several investigations have failed to show any more effective method of applying fertilizer for this crop. For instance, an experiment designed to determine if placing part of the potato fertilizer at plough depth in each furrow would be more effective, was conducted at the Dominion Experimental Station, Fredericton, N.B., for five consecutive years.

During this period, says T. C. Chiasson, Station Agronomist, applying the fertilizer in bands with the potato planter at the time of planting, gave an average of twenty bushels marketable potatoes more per acre than applying three-quarters on the plough sole and the remainder at planting time.

Placing the fertilizer direct with the seed and at the same depth by means of the fertilizer attachment on the grain drill is the most effective method known for grain crops. Should the equipment needed to apply it in this manner not be available, the next best method would be

to broadcast the fertilizer on the ploughed ground and harrow it into the soil.

Broadcasting on the surface without working into the soil is the only practical method of applying commercial fertilizer for hay meadows, pastures and sod mulch orchards. Applications under the sod at a depth of three inches on pasture and four to eighteen inches in orchards have failed to show any advantage over surface applications at the Fredericton Experimental Station.

In order that surface applications may influence growth, they must reach the root system. Therefore, they must be applied when the land is damp and rainfall fairly frequent, that is, either in the fall or spring. With a nitrogen fertilizer, spring applications are best, since some of the nitrogen may be lost by leaching when applied in the fall.

For root crops and corn, there is no experimental data which indicates which method of applying fertilizer would be best under the soil and climatic conditions of the Maritime Provinces. Experiments elsewhere, however, indicate that placing fertilizer in bands on each side of the seed would be best for corn. At the Station, good results have been secured with corn sown with the grain drill and the fertilizer applied with the fertilizer attachment at the time of seeding. For root crops, fertilizer has generally been applied broadcast and harrowed into the soil.

Impressed by the Men in the CFA.

by Keith Bradley

THE calibre of the men impressed me more than anything else at the annual meeting of the Canadian Federation of Agriculture. These men were, for the most part, farmers making their living directly on farms, or working closely with farmers and at the same time owning farms of their own.

Herb Hannam, President of the C.F.A., a man with a ready smile, an infectious laugh, a keen mind and bull-dog determination, always had the situation in hand. Stewart of the Ontario Federation, Habing of Manitoba, Wesson of Saskatchewan and Lang of Quebec were all fast-talking, straight-thinking men who knew their subject thoroughly and could hold their own anywhere. These were men to remember. After watching these and other delegates in board meetings and open meetings for seven days, there is no doubt in my mind that farmers have done a fine job in choosing their representatives.

The theme of the meeting was support prices and what we could expect in the future. There was a singleness of purpose from Prince Edward Island to British Columbia. No delegates from any particular section of the country tried to belittle the situation, or claim they had an answer. They felt the government had broken faith with them, after selling their produce at low levels during the war, by not honouring its promise of "adequate and stable returns for agriculture." The general impression was that, if the time for a business recession had come, it should be met by the total Canadian economy rather than by agriculture alone. As the president pointed out in his opening address, if the present trend continues, our economy will transfer from \$100 million to \$200 million from the income of farm families to non-farm families, who, on the 1949 basis, have no reason to expect it.

Another point that was rather forcefully brought out was how closely the producers are associated with world affairs, and how far from the truth is the all too common complaint: "I am just a farmer — there is nothing I can do."



Part of the Quebec farm forum group at the CFA meeting in Guelph, with Leo MacIsaac, P.E.I. secretary, almost hidden in the rear. The Quebecers include J. D. Lang, Brysonville; Neil Creller, Frelighsburg; Gordon Shufelt, East Farnham; Keith Bradley, Mansonville; Mrs. Gilbert Telford, Shawville; and Mrs. Donald McElrea, Lennoxville.

Farmers of the world have played a large part in the formation of the Food and Agriculture Organization and in particular the International Federation of Agricultural Producers. Each organized group has the opportunity to bring its opinions to bear through its representation on Farm Forums, Canadian Federation of Agriculture and the I.F.A.P.

Meeting at the same time as the C.F.A. was the National Council of Farm Radio Forum. The announcement from this meeting that Joe Galway was resigning and Floyd Griesbach was taking the National Office rather dampened the spirits of the Quebec delegates. However, sorry as we were to lose Joe from the National field and Floyd from our Quebec office, we were pleased that Floyd was chosen as National Secretary.

We also learned that Farm Radio Forum was the only organization of its type in the world. In some Scandinavian countries, though little is known about Canada, they all know we have Farm Forum and what it is and plans are being made to establish an educational program like Farm Forum in India.

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Hay-Handling Equipment

by A. C. Malloch

Are you interested in getting your hay in more quickly and with less labour? If you are, don't miss this article. It tells what each type of machine can do, and what combinations of machines work best together. And it will help you in making your forage plans.



Putting baled hay into the mow at the Fredericton Experimental Station.

WHILE one could discuss hay handling equipment from a number of angles, a logical approach is to consider three methods or systems of hay harvesting: (1) loose hay, (2) baling and (3) ensilage. On this basis, the necessary equipment is easily tabulated for each system so that, with the wide range of capacities and types at present available, the most economical combinations of machines can be selected for any given conditions.

The following table shows basic equipment and storage facilities required under each of the three systems mentioned.

In addition to the items listed, the recently developed stem crusher may find a place under all three systems in order to permit the stems to give up their excess moisture more quickly, thus relieving the essential leaves of part of their drying job. This machine is at present rather too expensive for wide-spread popularity, but as has happened before with other products, changes in design and manufacturing processes may result in an efficient stem-crusher at a price which will be attractive. Also, the extremely versatile "power box" type of trailer could be used to good advantage in all 3 methods although it is probably best adapted to handling ensilage.

The tedder, buckrake, stacker and tripods should also be considered in any canvass of bulk hay-making equipment, since they have in the past, and probably will con-

Loose Hay	Baled Hay	Ensilage
Mower	Mower	Mower
Side delivery rake	Side delivery rake	Side delivery rake
Loader	Pick-up baler	Pick-up chopper
Wagons	Trailer Wagons or Truck with bale loader	Trailer wagons or Trucks
Slings or hay-fork	Slings or grapple fork	Unloader
Barn	Barn	Crop blower
		Silo

tinue in the future to contribute to sound practice under certain conditions.

It will be noted that mower and side delivery rake are indicated for ensilage harvesting, as well as for loose and baled hay, instead of a forage "clipper" which cuts, chops and loads into a trailer or truck in one continuous operation. And, while the question is admittedly debatable, it would appear to be better practice to allow the hay to wilt in the field after cutting, then to pick it up from the windrow with a chopper fitted with pick-up attachment. The arguments pro and con have no place in this brief review and, in the final analysis, the issue will be decided on the basis of experience.

Cutting

Mounted or semi-mounted tractor mowers are gaining wide popularity by reason of their speed, dependability and ease of operation, with the emphasis on the largest size available for the particular tractor involved in order to save much time which, with a shorter cutterbar, would be lost in turning.

Raking

A new and unique design of mounted side-delivery rake has recently appeared which, it is claimed, moves the hay less than half the distance from swath to windrow than is the case with the older types. This machine rolls the hay at right angles to the line of travel, hence the action is gentle and not so likely to shatter leaves.

Available also, in several makes and sizes, are left hand side-delivery rakes fitted with tedding devices which gently lift and turn the hay in a manner designed to preserve the all-important leaves. The left-hand feature is significant, as it permits following the mower at a time interval dependent on the drying rate, and folding the swath into a windrow with the slow-drying stems exposed to sun and wind while the leaves are tucked under and shaded.

Baling

Hay has been baled in this country, in relatively small quantities, for many years, but not until the advent of the pick-up baler did this system achieve any widespread popularity. The stationary baler was used largely for the small percentage of our hay crop which had to be shipped considerable distances. A large crew was required for its operation and the hay was brought to it by buckrakes or wagons and fed by hand. Tying was also a manual operation, wires being passed by hand from side to side and twisted while the pressure was maintained by the action of the plunger forming the next bale.

The first balers of the pick-up type retained the manual tying, but soon gave way to those which adapted the principles of the binder knotter to the use of heavier twine. This development, plus power takeoff drive, made the modern pick-up baler a one-man machine; and it was a simple step, where power permitted, to add a trailer, with a ramp up which the bales were pushed directly from the bale chamber.



Pick-up baler with automatic twine-tier.

Pick-up balers tying automatically with wire also are available, as are the types which form a cylindrical, rather than a rectangular bale. For the cylindrical type it is claimed that, due to the shape of the bale, better air circulation is ensured in storage, hence hay can be put up with a higher moisture content.

Forage Harvester

The pick-up type of forage harvester is stressed since it is felt that the resultant ensilage will store better. These machines, of which several reliable makes are now being produced, are usually equipped with a mounted engine, since considerable power is required to chop and blow into a truck or trailer, and the mounted engine permits the machine to be drawn by a smaller tractor than would be required if the harvester were operated from the power take-off.

Loading

Hay loaders also have been improved in recent years, not only as to the bearings and the pawls and ratchets which transmit power from ground wheels to pick-up rolls and elevators, but also in strength, to permit their use in handling relatively green hay for chopping or ensiling at the barn.

For use in loading bales from the ground to a truck or

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trailer there are available several makes of bale loaders, traction driven, which may be attached to the side of a truck or trailer and which, with careful manipulation by the driver, will straighten bales out and elevate them high enough above the truck platform so that manual labour consists largely in guiding them down to their proper position in the load, little actual lifting being required. This is in decided contrast to hand loading, particularly for the upper half of the load, and is a good example of the many ways in which mechanization has contributed to the reduction in man hours per ton of fodder harvested.

Transporting

With regard to transportation from field to storage, the wagon, trailer or truck suitable for bulk hay may also be adapted easily and quickly to handling bales or ensilage. The buckrake is, of course, the exception to this rule, being limited to loose hay where the field is close to the barn.

Unloading

Unloading equipment includes the many familiar makes of slings and hay-forks for bulk hay as well as grappling forks for bales. These may be mounted to unload from outside one end of the barn, or from the covered driveway, or both. They still handle a large part of our farm-fed hay, though the percentage is rapidly decreasing, as improved systems of harvesting gain ground.

For unloading bales, a companion piece to the traction type bale loader mentioned above is a bale elevator consisting of a long, truss-type frame supporting a conveyor chain and powered by a small single cylinder gasoline engine or a fractional horse power electric motor. This device is light and easily moved to new positions, and is a time- and labour-saver where large tonnages must be stored in the shortest possible time.

To see almost complete elimination of manual labour, however, we must take a look at the almost automatic equipment available for handling grass silage. Trailers are fitted with canvas bottoms which are pulled to the rear by a power-driven roller, thus feeding the load into the hopper of the crop blower. Or a false front-board may be pulled to the rear in a similar manner, with the same

result. Other devices for unloading silage include ordinary dump trucks, and trailers with slat type raddles similar to the conventional manure spreader.

The crop blower is usually fitted with a hopper which extends full width of truck or trailer, and which contains a screw type conveyor feeding silage into the fan housing. These blowers require substantial power, but will carry large tonnages quickly to a considerable distance, vertically or horizontally.

A blower is also available which unloads the trailer by means of suction created by the blower itself, in much the same manner as the domestic vacuum cleaner picks up dirt or dust from the floor. The operator singly lowers the suction tube on to the load and moves it about until all silage has been drawn in.

An unusual type of unloading machine was recently developed in the form of a compressed air gun designed to shoot bales from ground level through a door or window of the mow. This gun, built experimentally, required a 5 horse power gasoline engine driving a two-stage air compressor with capacity of 21 cubic feet per minute at a pressure of 175 pounds per square inch. And, while such machines are not likely to appear on the market for some time, the incident serves to emphasize the very great amount of thought which is being directed towards elimination of hand labour.

Equipment of this type has done much, and will do much more, towards taking the drudgery out of the forage crop harvest which, with the spreading of barn-yard manure, has heretofore been the hardest part of farming from the labour stand-point.

Improvements in Old Machines

Apart from the new or improved types of farm machines resulting from the demand for new systems of farming, we have seen recently some improvements in design resulting from the greater power and higher speeds of today's operations. These include rubber tires for all sorts of mobile equipment, ball or roller bearings resulting in lowered friction losses and longer life; pressure lubrication through grease fittings which are more easily located and serviced than the old-fashioned oil holes; roller chain and V-belt drives replacing hook type chains and flat belts; spring loaded slip clutches to protect machines from overloading, and many other appliances tending toward greater speed, reliability and efficiency.

A final word about storage space. When we consider that on a dry matter basis a ton of loose hay occupies from 475 to 600 cubic feet of space in the mow, depending on type and length of time stored, chopped hay 275 — 325 cubic feet and baled hay about 235 cubic feet, we are in a better position to appreciate the tremendous saving in space, due to the use of grass silage, which occupies about 150 cubic feet per ton. Against this must be set the fact that a silo designed for corn must be reinforced before being used for grass silage, since the latter crop exerts considerably greater pressure on the sides.



A semi-mounted tractor mower in operation.

Full Value from the Farm Garden

by H. R. Murray

THE object of a home garden is to produce a sufficient supply of fresh vegetables for the owner's table. This supply should start with the early spring and continue until frost, with a sufficient surplus for storage and canning to last through the winter. In most parts of Eastern Canada this is possible if careful attention is given to planning, choice of crops, and suitable means of storage. Few people realize how many different vegetables can be grown successfully with kinds and varieties to suit every taste.

The home garden may be made into a very profitable venture, with small plot of ground supplying a large amount of fresh vegetables. Furthermore, vegetables produced in the home garden may substituted for more costly articles of food and thus cut table costs, while providing valuable supplies of minerals, vitamins and roughage.

In selecting the site for a garden, care should be taken in locating it. The garden should be near the house, both for convenience and because gardening is usually a spare-time proposition. A southern slope is recommended as the soil usually warms up earlier in the spring and permits earlier planting. It should have good drainage, both for water and air and, as vegetables require plenty of sunshine and moisture, it should not be heavily shaded.

It is best to select a sandy loam, as this is most suited to vegetables in general. This type of soil warms up quickly in the spring, drains effectively, and is easy to work. It is also easy to keep in good physical condition, as it does not bake or crust.

The size of the garden will depend entirely upon the size of the family and the space available. A plan should be made and the required ground allotted to it, allowing for a big enough garden to provide for canning and storage. Every family should can at least 10 different

Through careful planning it is possible to have fresh vegetables from early spring until freeze-up, and also a supply to be canned for the winter. The results will be lower food bills and better nutrition.

vegetables. The winter's supply of canned produce should include at least 20 quarts of tomatoes and 10 of certain other vegetables for each person. In addition, it should include for each person 2 or 3 bushels of potatoes, 5 heads of cabbage, and 40 pounds of other vegetables, such as beets, carrots and turnips.

It's a good idea to plow the garden plot in the fall as this will permit earlier spring preparation and planting. Humus-forming material turned under in the fall will decompose more rapidly and enrich the soil more for the early crops than if turned under in the spring.

After plowing or, if this was done in the fall, just as soon as the ground has dried out enough to work we should pulverize the soil thoroughly and work it down to a smooth, fine, firm condition. In the small garden, this can be accomplished by raking, but in larger gardens, the soil should be disked after plowing, and then harrowed and leveled with a drag for the smoothing touches. This finishing is important, because if seeds are planted in a coarse, lumpy soil they will be very poorly covered and the result will be poor germination, a poor stand, and a poor yield. A final preparation of the seed bed, such as hand raking, is recommended if the garden is not too large.

Points in Planning

Early in the year the actual plan for the home garden should be made on paper to show the arrangement of the crops. No one garden plan will suit all conditions or all tastes, but certain principles should be kept in mind when preparing it. The vegetables planted should be those most desired by the family. Always keep in mind that a small garden, well cared for, is far better than a large one which is neglected. Regardless of size, it should be planned to be economical of labour. In small gardens, much time and labour can be saved by the use of a wheel hoe. In larger gardens it is best to group the plants of similar size and season and to plant in long rows sufficiently far apart for horse cultivation. Other things being equal, it is usually best to have the rows run north and south, for then the effects of shading are less marked.

Perennials, such as rhubarb, asparagus, bush fruits, berries and other crops that remain in one place for several years should be located on one side or at the end of the garden, so they will not interfere with plowing and other operations of land preparation. Parsnips, salsify, and other long-season crops should be grouped together. All crops which occupy the land during the same period of the year



Long rows make it possible to use a horse.

should be planted side by side. If possible, further arrange the vegetables according to the number of days required for maturity. If the early-maturing crops are planted together, this space can be used for second plantings after the early crops are removed.

In buying seed, demand high quality and be ready to pay for extra value; in the long run the best seed will be found the cheapest. The yield and quality secured at harvest time will more than pay for the extra cost. Unless very small quantities are desired, seed should be bought by the ounce or pound rather than in small package lots. Buy only from reputable seed houses, and preferably from local dealers who make sure their seed will meet the local requirements. When purchases cannot be made direct from seed dealers, seed can be ordered from a reliable seed company by mail. In ordering from a seed catalogue, it is generally better to select standard varieties rather than the highly-featured new sorts.

Degree of Hardiness

The date of seeding will vary somewhat from year to year with different seasons. The vegetable crops can be grouped into four classes: *hardy*, which includes onions, spinach, lettuce, and round peas; *half-hardy*, which includes beets, carrots, cabbage, cauliflower plants, and wrinkled peas; *tender*, which includes corn, potatoes, and tomatoes; and *very tender*, which includes melons, cucumbers, and squash. Frequently the season will develop in such a way that hardy and half-hardy classes may be planted at the same time.

In seeding, open a furrow of proper depth — generally four times the diameter of the seed — by the repeated pressing of the loosened soil with the back edge of a rake along a tightly-stretched garden line, or by using the corner of a hoe and making a drill of the right depth. Following this, the seed may be shaken from a packet or an envelope, scattering the seeds in the bottom of the furrow. Larger seeds such as peas or beans are often spaced by dropping them with the fingers. An even distribution is the aim. A rake or hoe will serve to cover the seed with the right depth of fine soil. Avoid putting lumps of soil or stones on top of the seed. The final step is to firm the soil on top of the row by tamping with the back of a rake.

This sowing will usually be too thick if a large proportion of the seeds come through; hence the plants will be crowded. This is especially true of the root crops. To provide space for proper growth, thinning should be started just as soon as the third or fourth pair of true leaves have developed. Thinning at this stage will prevent the growth of weak, spindly plants.

Throughout the summer, garden soils should be given frequent shallow cultivations. This operation will keep the surface soil well worked, and will form a mulch which will retard moisture losses as well as destroying weeds. After each rain the soil should be cultivated as soon as it is dry enough to work. This is to disturb germinating weed seeds

and to prevent surface baking, or the formation of a crust. Cultivation may be done by horse-drawn implements in larger gardens and by wheel or hand hoes in smaller gardens.

Check for Troubles

A number of insects and diseases attack garden crops. Since, as a rule, the injury is not noticed until it is too late, careful inspections should be made from time to time. Preventive measures, such as spraying and dusting, are important. Bordeaux dusts and sprays are the most generally used controls for plant diseases, and should be carefully applied when needed. If insects attack the leaves, arsenical dusts or sprays should be used. Combination sprays and dusts are often used for controlling insects and diseases at the same time. Sucking insects, such as green flies or aphids, are controlled by spraying or dusting with nicotine compounds. New materials such as D.D.T. are now recommended, but the directions should be carefully followed.

The best time to harvest vegetables is largely determined by their stage of growth. Quality in vegetables varies widely according to the kind of crop, weather conditions, and the care given during growth.

Peas, sweet corn, and snap beans lose their quality very rapidly after harvesting, and should be prepared for the table as soon as possible after removal from the plants. High temperatures hasten ripening, and also deterioration. Harvesting should not be delayed until such vegetables have reached full maturity.

The root crops, such as radishes, carrots, beets, and turnip, give best quality if harvested when comparatively small. There is a definite relationship between size and quality; the smaller the roots — within reason — the higher the quality.

During periods of hot or wet weather, head lettuce will become worthless in a short time; it should be harvested as soon as the heads are firm and compact. Cauliflower will also deteriorate rapidly, and the heads should be cut as soon as they are of good size and well blanched.

Fall cabbage and celery will stand light frost but should be harvested before severe weather sets in. Potatoes should be dug before the rainy days of autumn. A few parsnips may be left in the ground all winter and harvested in the spring, although it is advisable to have a small quantity in storage for use during the winter.

British Farms Are Mechanized

Figures on the use of machinery on British farms show Britain is now one of the most highly-mechanized countries of the world in proportion to its agricultural acreage. Mechanization of farming, accelerated during the war, is still proceeding at a great pace, enabling industry to achieve two ends: increased output while making do with restricted manpower.

What Sort of People Are Quebeckers?

"I'm curious to see what sort of people you Quebeckers are — you have such a capacity for building national figures," A. B. MacDonald, national secretary of the Co-operative Union of Canada, told 60 people attending a Co-operative Conference in the Mount Royal Hotel, Montreal.

"First you send Joe Galway to become national secretary of National Farm Radio Forum," said Mr. MacDonald, "and now it's Floyd Griesbach."

Claiming that co-operatives must be organized nationally to protect the interests of the people, Mr. MacDonald explained that the Co-operative Union of Canada represented provincial co-operative unions from every province but Quebec and Newfoundland, and that it worked closely with the Quebec group, the Conseil Co-operative Canadien.

J. A. Pinsonneault, president of the Co-operative Federee de Quebec, brought greetings from his organization. He said that co-operatives were improving the general living conditions in the country, and helping to produce better citizens.

J. E. O'Meara, economist from the Central Experimental Farm, Ottawa, said there were 3,600 co-operatives in Canada, with assets close to a billion dollars. Their progress, he said, was amazing. Quebec had more co-operatives than any other province, but many of these groups had not been reporting their activities.

Success stories were told by representatives of three county co-operative health service groups. Gordon Shufelt, secretary of the Brome County Co-operative Medical Services, reported that his group, set up last April 31, had 112 members. Up to date it had paid eight claims totalling about \$700; and it expected to end the year with a good surplus.

Miller Gibson, president of the Gatineau County Co-operative Medical Services set up last May 1, reported 114 members covering 316 individuals. Eight claims had been paid for a total of \$454, leaving a balance of well over a thousand dollars.

Mrs. Hillis Graham, educational director of the Pontiac County Co-operative Medical Services, said that the Pontiac group which was launched last April 31, now had 376 members, covered over 1,000 individuals, and was still growing. Some 52 claims had been paid, costing \$2,000, and there was a \$4,000 balance in the treasury.

Mrs. Graham described the activities of the Pontiac educational committee, which consisted of seven members drawn from districts not covered by board members. It was their job to interest people in joining the medical service co-operative, and to supply them with full information on its operations. This committee had recommended that the Board send reports on each of its meetings to the press, including the number of claimants, their names and the amounts they were paid. It had also recommended that

the board set up an item in its budget to cover educational activities.

These reports were covered by a long and extremely keen discussion on health services — what they had to offer, how they were organized and how they operated.

E. T. Cutts of Montreal described in detail the insurance coverage which farm forum members could get on their automobiles through the forums' fleet policy, at a 25% reduction from individual policy rates. Keen interest in this subject was shown by the number of questions raised by the meeting.

Described Credit Unions

The Canadian representative of the Credit Union National Association, Gordon Smith of Hamilton, Ont., said that 12,000 credit unions were operating in North America. He described the objectives of CUNA as promoting the practice of thrift, making credit available to people who need it, and educating people in handling their own financial affairs so they could get the most value from every dollar.

He said there was now a CUNA Supplies Co-operative which printed pass books and other credit union materials in quantities running up in the millions, thus cutting the cost. The CUNA Mutual Insurance Society wrote life insurance up to \$10,000, and to the age of 70. There was also a bonding service for credit union officers.

R. N. Elliott of Montreal, representing the Quebec Credit Union League, described how credit unions could be set up in rural Quebec. He suggested that the municipality should set up a board, with a president, vice-president, secretary and manager. Then there could be a number of credit unions within the municipality, each with its cashier to collect deposits on certain days each month. These deposits would then be transferred to the manager for the municipality. Thus local credit unions could carry on their operations with very little trouble.

Don't Be Caught Napping

Nothing is more of a white elephant than a tractor that will not go. If the farm tractor wasn't thoroughly overhauled in the fall, it is not too early to attend to it now. Spring has a habit of catching everyone unaware, and a worn part on the tractor can often mean a few days' delay when the spring rush starts.

And other farm machinery and equipment can well be checked too. All bearings and other moving parts should be carefully examined, and those showing excessive wear should be renewed. All bolts and setscrews used in adjustments should be checked to be sure they operate. Machines should also be checked for broken castings. Because a machine was running well last time it was used in the fall, that's no guarantee it will operate perfectly first thing in the spring.



DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec
Department of Agriculture*

Quebec Cheese Scores High

At the British Empire Dairy Show at Belleville late last November, Quebec cheese-makers demonstrated that they know their business. This year there were over 100 contestants exhibiting cheese, representing all parts of Canada. Twenty-three of the contestants were from this province, and did their part to keep Quebec's colours flying. The eight first prizes for September and October cheese all went to Quebec makers.

A special gathering was held in the offices of the Department of Agriculture early in February, when prizes, trophies and certificates were distributed to the winners by the Minister of Agriculture, with Dr. George Maheux acting as master of ceremonies. These trophies were those offered in connection with the Quebec cheese making competitions. The Department makes grants totalling \$1500 each year in connection with this contest, of which \$1200 is earmarked for bursaries to the Provincial Dairy School.

The different winners, in order of merit, were Lorenzo Houle, St. Thomas-Didyme; Roland Lafleur, Pierreville; Alph. Prudhomme, St. Jovite; J. C. Girouard, Ste. Croix; J. J. Boulianne, St. Henri de Taillon; Marcel Plante, Ham North; Gerard Lefebvre, St. Zephirin; Pierre Tremblay, St. Hilarion; Anthime Lanouette, St. Alban; Fernand Bernard, Princeville.

At the Belleville, show, the J. D. Leclair trophy, offered by the Province of Quebec, was won by R. de Grandpre, Aston Junction, who made the highest score of any exhibitor. Rosario Lavoie, St. Prime, won the Co-operative Federee cup for the best October cheese. Other winners of

prizes or certificates were Jules Grenier, R. Cote, R. Lavoie, Edg. Proulx, Leo de Grand Pre, L. P. Caron, L. G. Desgagnes, for September and October cheese, and M. D. Baillargeon for October cheese.

The best cheese is made in Quebec, and it might be interesting to trace briefly the history of cheese making in this province.

Apparently the first cheddar cheese made in Canada was manufactured in Ontario, probably around 1865. The exact date cannot be determined, but by the time the first cheese factory was opened in Quebec, Ontario was already making quite a bit, and even exporting some to England. This cheese was marked "Ontario cheese".

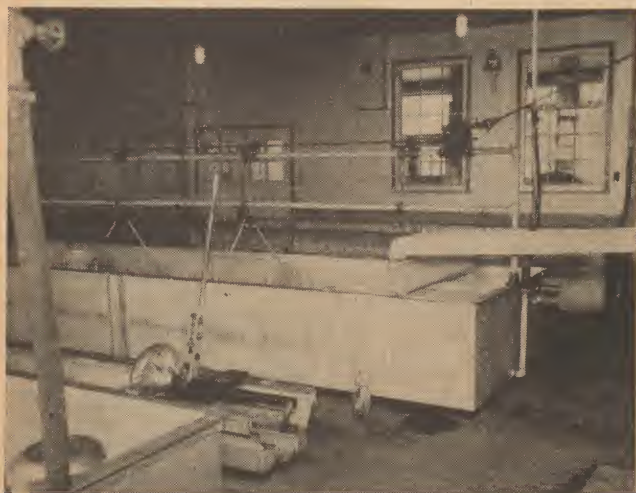
About 1880 several cheese factories were operating in Quebec, especially in the Eastern Townships, around Farnham. The first Quebec cheese sold on the export market was the "Townships" brand. It took only a few years for cheese making to become fairly general in the province, and the name "Quebec" began to appear on the boxes.

Ontario cheese makers had a head start on those of Quebec, and "Ontario" cheese had already made a name for itself; when Quebec cheese appeared on the market in addition to the "Townships" brand, the buyer could be excused for thinking that Canada made three different qualities of cheese, a belief that was not without foundation.

Ontario, or "Western" cheese, corresponded to No. 1 quality; "Townships" cheese to No. 2; "Quebec" cheese to No. 3. This was so generally accepted that the English buyer used the numbers to specify what cheese he wanted. But Quebec cheese makers were determined to improve their product, and in this effort they had the help of the Quebec Cheesemakers' Co-operative, the Dairy School at

St. Hyacinthe, of the provincial inspectors, etc. And the system of handling sales in those days did little to help the cheesemakers who were anxious to put a good quality product on the market. Apparently it was common practice, once the cheese was in commercial hands, to turn Quebec No. 1 into Ontario cheese, and Ontario No. 3 into Quebec cheese.

Grading of cheese in Quebec was first done in 1910, and, as can be imagined, this innovation was not greeted by cheers. However, thanks to the concerted efforts of those people mentioned above, there was a definite improvement in quality, and also in the system of marketing our cheese.



Quebec cheese factories are among the best.

Back in 1908, the people in England found it hard to believe that Quebec could make good quality cheese, and, probably, in their shoes, we would have thought the same.

In 1916, the Cheese Co-operative made a trial shipment of Quebec cheese, identified as such. Up to this point, the name "Quebec" on cheese was an indication of poor quality. But the report from the British buyers came back — "Quite satisfactory", and this was the first favourable report that had been received on Quebec-made cheese for 20 years.

Here are some figures that will show the export position as it was in 1919. During that year, the Province of Ontario exported 1,000,000 boxes, and Quebec 800,000. Of this, 1,600,000 boxes were exported as "Ontario" or "Townships" cheese, and 200,000 as "Quebec" cheese. In other words, Quebec got credit for 200,000 of the 8,00,000 boxes she exported. This No. 3 cheese went overseas as a sample of what our cheese makers could do. Buyers refused to pay as much for Quebec cheese as for Ontario cheese, giving as an excuse that the latter was better known on the British market.

Then the Cheesemakers' Co-operative took a momentous step. At its annual meeting in July, 1920, held at Bic, the following resolution was passed: "Since the results of sales of cheese at auction in Montreal since the beginning of the production season have not been satisfactory, the Society shall take the steps necessary to put its brand on all cheese it shall receive in future, after having graded it into one of the following grades: Special, No. 1, No. 2 according to its quality, the cheese to be then exported by the Society, or offered to the trade in Montreal, whichever shall be judged to be the better market."

Cheese makers were encouraged in their decision to take decisive action by a report that was brought back from Europe by the manager of the Co-operative, a trip taken in company with manufacturers and businessmen who had gone overseas to try to renew commercial contacts that had existed before the war. He reported that the Cheesemakers' Co-operative was well enough known in Europe, and was of the opinion that there would be a market for any cheese offered under the Co-operative's brand.

Cheese exports from Quebec began on a large scale in 1920, and the cheese sent overseas could hold its own against any other. For the first time in 40 years, "Quebec" on a cheese box was a recognized symbol of quality. In the same year, an agreement was reached with one of the largest importers in England, by virtue of which Quebec cheese was sold for the same price, and on the same basis, as the cheese from Belleville.

Much has happened since then, and much water has flowed under the bridge, but Quebec cheesemakers, individually and through their organizations, are following in the footsteps of the pioneer cheese makers of this province who put our cheese onto the export market with such success.

Bonus for Good Potatoes

At the Royal Agricultural Winter Fair in Toronto this year, there were 26 entries of Quebec potatoes, and 24 of them won placings.

Twenty entries in the seed potato class carried off 18 prizes, the highest being second, third, fourth, fifth and sixth, for Green Mountains entered by Theodule Michaud, St. Paul, Joseph Savard, Peribonka, Gustave Tremblay, Ste. Anne, Jos Marie Boucher, St. Paul and P. E. Desbiens, Chicoutimi.

In table stock potatoes, six entries won six prizes, the highest being third, fourth and fifth, won by Provin l'Ecuyer, Messines, Charles Dickner, Les Etroits and John R. McDowell, Shawville.

Prize winning potatoes do not grow by chance: it takes a knowledge of how to grow them, and, still more important, good seed to begin with. The Department of Agriculture is fully aware of the need of a more general use of good seed stock in this province, and is offering certain encouragements to growers to use better seed.

As from the first of February, the Department is offering a bonus to farmers who purchase "Foundation" or "Foundation A" seed grown in Quebec. The grant is \$300 per carload lot of 600 bags, and is available to growers who are in the commercial potato production districts. Orders are to be collected through the agricultural clubs, and the potatoes will be purchased by the Co-operative Federee.

As well as giving larger returns, good seed ensures a crop that is likely to be more resistant to disease, especially to bacterial ring rot.

Honour for Mr. Magnan

Mr. Jean Charles Magnan has been elected a member of the Academy of Agriculture of France, of which he has been an associate member for some years.

It is the first time that such a high honour has been paid to a Canadian agriculturist, and it is the culmination of a career which had been entirely devoted to the dissemination of agricultural knowledge and to agricultural progress. Mr. Magnan's efforts in founding regional agricultural schools in Quebec are well known, and the honour he has been paid reflects credit upon the entire Department of Agriculture, and on the Corporation des Agronomes.

The French Academy of Agriculture (with the Academy of Medicine), comes immediately after the Institute of France in importance. It is composed of 72 full members, 20 non-resident members, 12 foreign members and several associate members.

Father Robin had been away for some time, and when he returned he found three eggs in his nest. That was fine, except for the fact that only two of them were blue—the other was white.

He called Mother Robin over for an explanation. "Oh," she said coyly. "I just did it for a lark."

Apple Growers Discuss Problems

Marketing policies, spray programmes, and efforts to find supplementary outlets for the apple crop engaged the attention of Quebec apple growers at the annual winter meeting of the Pomological Society held February 9, 10 and 11. Undaunted by the first real snowstorm of the winter, members came from far and near to make this one of the best attended meetings on record. Also present officially, for the first time, were groups representing the wholesale trade, and, again for the first time, the Society had as its guests representatives of every other apple-growing province in Canada.

A new departure, and one which scored a signal success, was the organizing of the main sessions into forums, when a panel of experts in marketing, growing, spraying, etc., answered questions from the floor, chosen from a list made up of questions that had been submitted to the executive well in advance of the meeting. Twenty-one questions on marketing and a considerably larger number on spraying or crop protection generally, kept the experts busy. This part of the programme had been well organized, and the audience took more useful information home with them than they could have extracted from listening to a number of prepared papers. The replies to the questions, as given by the experts, were recorded, and it is hoped that all or most of them will be printed in the annual report of the Society.

Business Sessions

President Fontaine pointed out that present membership in the Society is less than 500; he thought that other factors besides the increase in fees were responsible for the decline. There are groups of growers who do not approve all the policies of the Society, and who express their disapproval by neglecting to join. Others, who have experienced good business since 1940, apparently feel they can

get along on their own without bothering to take out membership. This, he felt, is a mistaken idea; all growers can benefit from the co-operation and exchange of ideas which come from membership in a professional organization.

Acting-secretary J. E. Duschene pointed out that, with last year's crop the biggest since 1943, there had been difficulty in getting rid of it, and many growers had barely met their costs of production. But the way to larger returns, he pointed out, lies not in a smaller crop, but in lower production costs, and provision, through cold storage, to spread out the marketing season for the late varieties. The Farnham storage plant has added storage facilities for 150,000 bushels more than could have been stored last year, but still more such plants are needed to take care of all our crop.

Minister of Agriculture Present

The Hon. Laurent Barre was a guest at the banquet, and spoke at some length on the problems of cold storage and of the disposal of the crop. With regard to storage, he agreed that a pressing problem was to make provision for growers to market their crop over a longer period, which can only be done if we have adequate cold storage facilities. He praised the initiative of the group of growers who had gone ahead with construction of the Farnham plant, but stated that the Department would not assist in the erection of other storage plants until this new plant had been operating long enough for any possible faults of construction or of planning to show up. Before the Department puts any money into cold storage plants, it wants to know just what type of plant will give the best results.

With regard to another suggestion that has been made in various quarters, to use surplus apples to make hard cider, he stated that he was, at present, quite opposed to this idea. He felt that, were a number of plants throughout Quebec to start making cider, before long there would be so many different kinds, qualities and types of cider on the market that practically every bottle bought would contain a different product, with the result that the purchasing public would become so disgusted that they would refuse to buy. Until some way could be found by which an absolutely uniform cider could be put out, no matter where it was made, it would be wiser not to make any at all. At the present time, he felt, we do not know enough about cider making to be able to secure this uniformity.

With regard to marketing, he felt that the Canadian market was the one Quebec should attempt to supply; past experience of Canadian farmers selling on the export market hardly justified Quebec apple growers in trying to produce apples for export. And he did not think that growers as a body would support any legislation calling for uniform grading of apples, and he could see no value in passing laws which could not be enforced.



The smooth running of an annual meeting depends on many behind-the scene activities. Here Messrs. Proulx, Stevenson and Berthiaume put the finishing touches on arrangements for the banquet.



Social gatherings make welcome breaks between business sessions. Many important talks take place over a glass of apple juice.

Other speakers at the banquet were A. K. Lloyd, R. J. Leslie and R. Ferris, who brought greetings from the growers of British Columbia, Nova Scotia and New Brunswick, respectively; Don Green of Chazy, N.Y.; Col. Wheeler, representing Deputy Minister Taggart; Ald. Sevignac, who welcomed the guests on behalf of the City of Montreal. Rene Trepanier, Provincial Deputy Minister of Agriculture, introduced Mr. Barre.

The resolutions committee asked the provincial government to do something about peddlers and their activities, and to come to the assistance of growers who needed cold storage facilities. Legislation permitting the manufacture and sale of hard cider was asked for, this being directed to the Minister of Trade and Commerce. A comprehensive floor price policy for Canada was urged, and a tree-removal campaign, to be supported by the Federal government, was asked for.

President for 1950 is Floyd Stevenson, Franklin Centre. J. E. Duschesne, who has been acting as secretary for the past while, pending the appointment of a permanent secretary, was named vice-president. Jacques Berthiaume was named secretary-treasurer.

Although farming in this province is mainly a family affair, nevertheless the Provincial Farm Labour Office in Quebec received, during 1949, a total of 4,796 requests for farm workers from farmers, and placed 4,665 workers on farm. Altogether therefore, the Office handled 9,241 requests and offers of employment.

Haying and harvest accounted for most of the activity. Then there was the sugar-beet thinning season which required the placing of 494 farmers' sons on sugar beet farms, most of these boys coming from Beauce County. In October when beet pulling was in full swing, another 54 workers were found jobs.

Through the Department of Agriculture, 14 Polish veterans were established on farms of their own during 1949, and a Polish agronomist was placed at the disposal of these families to help them in buying their farms and in getting established in a new country.

Breeders of Purebreds Hold Annual Meetings

MEMBERS of the Quebec Hog Breeders' Association at their annual meeting decided that it was time to put emphasis on raising a type of hog that would satisfy market demands, and would, at the same time, provide satisfactory show types. The Yorkshire breed has long been popular, but there are by now a number of strains of the breed in Quebec, some of which are highly prized for show purposes but are less apt to qualify for superior registry; in some other lines, the situation is reversed. The breeders were of the opinion that it is now necessary to search for the ideal type which would be suitable for all purposes.

The question is to be studied by a committee of experts, who will endeavour to determine the ideal type toward which the efforts of hog raisers should be directed.

It was reported at the meeting that there had been an increase during the year of 45% in registrations and of 32% in transfers. Ernest Sylvestre was re-elected president of the Society.

Sheep breeders have also held their annual meeting, and were of the opinion that the only way that sheep breeding in Quebec can go is up. There is an increasing demand for good market lambs and a world shortage of wool, and they can see no reason why there should not be a considerable increase in sheep raising in Canada very shortly.

Members of the society went on record as approving the plan of the Federal and Provincial Departments of Agriculture to import stock from England to carry out the new sheep improvement scheme which has been described in previous issues, and assured the Provincial Department of their collaboration in putting the scheme across.

World production of wool is still far below demand, which is some 650 million pounds per year. Growers in Quebec have a market which could absorb several times the amount of wool that is grown here. Prospects are that washed wool will bring about 10 cents more a pound than last year, when prices were between 32 and 35 cents.

Azellus Lavalley was re-elected president, and the board of directors remains the same as last year.

The Canadian Horse Breeders' Society will also be directed by the same president next year, Joseph Hebert. The Society intends to continue its classification programme, which has been carried out with success in the past. It was suggested that some modifications be made in the prize lists of certain of our fairs, so that classes may be included that do not at present appear.

Pierre Labrecque assured the members that the Canadian horse was the horse of the future. An ideal general-type farm horse, native to this province, the Canadian, he thought, has a great future.

Professor Gustave Toupin was guest speaker at the luncheon meeting of the Quebec Purebred Breeders' Asso-

ciation, at which head table guests included also Dr. George Bouchard and Mr. Rene Trepanier.

The burden of Mr. Toupin's talk was that Quebec farmers should begin to really do something about bringing down their costs. "For the last 25 years," he said, "everybody interested in agriculture has realized that there are certain avenues through which farmers can get help and advice: these are our agricultural schools, the agronomes, co-operatives, agencies that provide credit: professional associations. We should make the best possible use of all these sources of assistance in our farming business."

As a first step in bringing down costs, Mr. Toupin urged that more livestock feed be grown on the farm. He advocated more extensive growing of alfalfa and clover, and was particularly insistent on the value of grass silage. He also thought that better planning of crops could be made so that milk production would remain high right up to the time the cows were brought in in the fall.

President of the Society for the coming year is J. P. Beauchemin, with Alp. Jargaille vice-president.

Another Barley Contest for 1950

For the fifth consecutive year, the National Barley Competition will be held in 1950, following much the same pattern as in former years. The National Barley Improvement Committee appears to be well satisfied by the results obtained so far in these competitions, which have brought a great impetus to the growing of quality barley in this province, and this satisfaction is expressed by their intention to continue this policy.

The Federal and Provincial Departments of Agriculture have a lot to do with making this competition a success; in Quebec, the supervising committee is under the chairmanship of Andre Auger, Chief of the Field Husbandry Service, and aiding him are department experts, and representatives of the Brewers' Association.

Honours in the 1949 contest went to the counties of Chateaugay, Pontiac, Drummond and Soulanges, and the grand champion was Real Primeau of Ste. Philomene de Chateaugay. Two hundred and forty-one farmers entered the contest, from forty-three different counties in the province.

As an idea of the capabilities of these growers, it might be pointed out that while the provincial average for barley is 22 bushels to the acre, the 1949 champion harvested a crop of 50 bushels, and the general average yield of all contestants was 45.6 bushels to the acre; more than twice the provincial average.

Want Central Agency to Buy Feed Grain

The establishment of a central buying agency through which Eastern Canadian farmers could buy feed grain co-operatively from the West was advocated at a meeting of the Quebec Council of Farm Forums held in Mount Royal Hotel, Montreal.

The meeting also asked the Canadian Federation of Agriculture to investigate the possibility of manufacturing a spread for bread, made entirely from dairy products, which could be sold at a price which would enable it to compete with margarine. The idea behind this suggestion was to gain back for the dairy industry some of the market it has lost to margarine.

To enable Quebec farmers to market their products more effectively the council decided to ask the Provincial Legislature to introduce a Provincial Marketing Act similar to acts in some of the other provinces.

Educational campaigns were suggested to acquaint the public with the true value of milk, eggs, butter, and other farm products. It was also suggested that Quebec cream producers should be organized, and the executive was asked to investigate the possibilities.

Other resolutions covered a soil erosion survey, relations among organized groups in Canada, a farm finance study and highway improvement. Chairman of the meeting was J. D. Lang, president of the Quebec Farm Forum Association.



Socks of Broadacres, Grand Champion Shorthorn at the Royal Winter Fair in the strongest steer show ever staged there. He tipped the scales at 875 pounds and brought \$2.40 a pound. W. D. MacDonald of Grainger, Alta., was the breeder and he was sold to and fitted by Ed. Noad of Claresholm, Alta.

Stocks of timothy and clover seed are low, both here and in the United States, this year. In Quebec, timothy seed produced in 1949 was 5,180,000 pounds, 50% less than usual. The same situation exists in the United States, where there was a crop of 39,000,000 pounds as compared with a crop of 68,000,000 pounds in 1947. And, to make matters worse, there was no carry-over, and the reserve is all gone.

Strippings

by Gordon W. Geddes

It is rather frightening to see the low valuation placed on continued prosperity in Canada by the Canadian government. This depends on continued prosperity for our farmers, which in turn depends on a sale for their produce. The home market can use the bulk of this, except for wheat but the little bit that cannot be used is what spoils the market for it all. While the farmers might be better off if they didn't grow that extra little bit, it would take quite a lot of arranging. Then in a poor year we should be short and there are always people in the world who need that extra little bit. Going to some bother and expense to take care of the little surplus, is only an insurance premium to protect us against a possible shortage — if we take care of it and do not let it gum up the works. But how is this to be done?

First we must find a sale for the surplus, even if it must be sold at a lower price. Next we must not allow this lower price to become the selling price on the home market for the portion used at home. While wage levels and employment in Canada remain high, consumers can afford a fair price for farm goods. But if they take advantage of circumstances to get a bargain on those goods, farmers' purchasing power goes down so that urban consumers cannot afford to pay a fair price. So it is to their own advantage to pay the fair price and the insurance premium.

Agents of the British government offered to take the entire surplus of Canadian farm produce, provided we would spend \$30 more per person per year for British goods. This was a reasonable offer and would have been only a small fraction of the amount spent in the United States where we have a troublesome dollar shortage already. But our Liberal government said no and prepared to say goodbye to the British market which we have been learning to supply and the enjoyment of which after the war was held out as an inducement to us to supply at reasonable prices during the war. The method of payment was no surprise to them for they were warned in 1947 that we must buy British if we wished to sell British.

HOW TO KEEP CHICKS ALIVE AND HEALTHY

Every year countless chicks die because of faulty management. Many others manage to stay alive but they will never, because of poor health, be profit makers for their owners. Successful poultry farming demands the type of good management outlined below. Check to see if a neglect of any basic rule is costing you money.



BROODER HOUSE — Unless the brooder house is new, it should be thoroughly cleaned and disinfected before chicks move in . . . preferably a month before to allow for complete drying. Wash down (preferably with a pressure hose) and use a strong hot lye solution and stiff push brush to remove caked material. Disinfect when dry. All equipment should be thoroughly cleaned and disinfected.



FEEDING — Chicks should be fed before they are 36 hours old. Allow each chick one inch of hopper space for the first five weeks, and then allow two inches. Until chicks are six to eight weeks old, feed Miracle Chick Starter. A perfectly balanced and scientifically tested feed, Miracle Chick Starter contains all the elements needed — proteins, carbohydrates, fats, vitamins and minerals — to bring your chicks through the dangerous early stage in good health and vigour. Feed chicks amply enough so that they will not eat the litter. Also see that they have plenty of fresh water, lukewarm for the first five days, and sprinkle grit on top of Miracle Chick Starter three times a week.



CHANGING LITTER — Change litter when too dirty or damp. Disinfect when necessary. Try to keep litter absolutely dry by turning every day and stirring thoroughly with a fork.



BROODER TEMPERATURE — Chicks are ruined by too much heat and also by too little. The brooder temperature (95° under brooder is usual) should be accurately adjusted according to climatic and brooder house conditions before they move in. After the first week, reduce the brooder temperature about 1° a day until chicks are seven to eight weeks old when the brooder should no longer be needed.



VENTILATION — Chicks need plenty of fresh, pure air. Brooder houses should be adequately ventilated and the ventilation should be gradually increased to acclimatize birds to natural weather conditions. A foot-high guard around the hover will protect chicks from draughts.



SELECTION OF LITTER — No litter is perfect, but tests have shown that litters made from either wood shavings, peat moss or straw, are more satisfactory than some other types. A deep layer with good absorptive power is necessary. To ensure cleanliness, litter can be covered with newspaper for first few days, and top sheet of paper removed once daily or oftener.



6 TO 8 WEEKS — When chicks are six to eight weeks old, keep building a profit-making flock by gradually mixing in Miracle Growing Mash until this is the complete diet. Miracle Growing Mash is specially compounded to supply all the needs of pullets . . . to mature them earlier and get them into production around five months. Pullets also develop a sturdy frame capable of withstanding heavy laying.



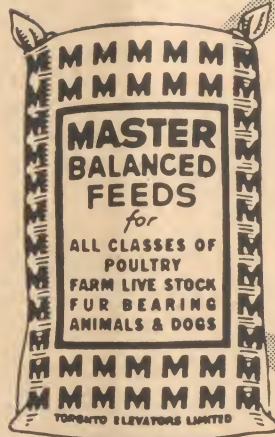
"MIRACLE" CHICK STARTER

If we had accepted this British offer perhaps their idea of purchasing price might not have been as strict as when they were paying in dollars. Even supposing it had been, the first horn of our dilemma would have been taken care of. Just how difficult would the second have been? Since we are better acquainted with the bacon market, let us take that for an example. We are told that our farm surpluses run from ten to twenty per cent of the total production. Suppose we put bacon in the bigger class. If the price of Canada remained at \$36 and we exported twenty per cent of our bacon at \$29, the loss on our exports would have been only 4% of the total value of our bacon at \$36. This is slightly less than $1\frac{1}{2}\%$ per lb. or \$1.50 per cwt. If it could be arranged for the farmers to pay this all they would still have a net price of \$34.50, without any government subsidy at all. As it is now planned, the Government is paying \$3.50 subsidy to get the farmers a net price of \$32.50. Surely a magnificent business deal! Probably an analysis of other exports would show a similar condition.

Here's the effect on our individual hog business. We will probably ship 40 hogs in 1950. For ease in calculation make their average weight on the rail 150 lbs. (we aim for 160) and we have 6000 lbs. of pork. Our average selling price last year was \$30 even though we shipped consistently on down markets. This would bring \$1800 less our share of the export loss which would leave us about \$1740. As it now is the best we can expect is \$27 or a return of \$1620 or 120 dollars less.

FIELDMAN wanted. Must be bilingual and have farm background. Preferably with butterfat testing experience. Apply in writing before April 21st, 1950, supplying fullest information in first instance to Secretary, Montreal Milk Producers Association, 515 Chat-ham St., Montreal 3, Que.

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Spotlight on Health Services

by J. S. Cram

THOUSANDS of families in rural Quebec are more than 10 miles from a doctor, dentist, drugstore and hospital, and don't even know where they could get a nurse. In fact, these conditions probably apply to well over a third of the English-speaking rural population of the province.

These facts have been brought to light in a survey made by the Quebec Women's Institutes, in which information was received from 35 branches in 15 counties. These represented 35% of the branches that received the questionnaire, which is quite a fair return. Other branches said they were unable to supply any of the information requested; so apparently their health services were not as good as those in places that reported.

The figures might be grimmer were it not for the fact that four of the 35 branches were in well-served towns, and several others were right on the edges of towns; so they don't represent a true cross-section of English-speaking rural Quebec. Still, they do supply interesting information on quite a lot of points.

Some 29% of the groups replying said they were at least 10 miles from the nearest doctor; 34% were 10 miles from a dentist; 11% knew of no nurse within 10 miles; 31% were 10 miles from a drugstore; and 37% were over 10 miles from a hospital. About half the groups said winter roads were bad, the condition of the road seeming to grow worse with increasing distance from medical services.

There were some extreme cases, too. East Bolton reported that the nearest doctor was 18 miles away, and charged \$15 for a home call. On a mileage basis that isn't out of the way, as most of the doctors are reported as charging 50 cents a mile each way on out-of-town calls, on top of their professional fees. But still, few farmers can afford to call a doctor very often at \$18 a call.

Port Daniel, half way down the Baie de Chaleur, says it's 30 miles to the nearest dentist and 60 miles to a hospital. And New Richmond reports that the nearest drug store is in Campbellton, N.B., which must be at least 75 miles. Other groups reported that hospital charges were very high, or that it was almost impossible to get a bed.

One of the key points of the survey is that 9% of the groups replying say they have no county health unit, although there is a unit in each of these counties. Another 20% of the groups didn't reply to the question about health units; and of those that did, very few had much idea of the work the unit was supposed to do. Apparently a good deal more educational work is needed, to acquaint the public with the services these units provide — and possibly some of them require bigger budgets and more personnel, to do all the work they are supposed to handle.

This lack of information on health units is further



Few people know much about their health services.

shown by the fact that 29% of the groups were unable to say whether local school children had been vaccinated, 34% didn't know whether they had been inoculated, and 60% didn't know whether they had been tested for tuberculosis. Even among the groups who knew that some of the school children had been immunized or tested, few knew how many had been done or what the vaccination or immunization was intended to protect them from; and very few knew whether they had been x-rayed or just patch-tested.

Know More About Cattle

Against this lack of information on human public health, we can set the fact that 77% of the groups knew that cattle herds in their areas had been tested for tuberculosis — all in some place, a high percentage in most. Still, that left 20% who didn't know whether any cattle had been tested, and 3% who said that no T.B. testing had been done locally.

Not so many knew about the testing of cattle for contagious abortion, caused by the same bacillus as undulant fever in humans. Only 43% said there was any testing in their areas — usually only cattle being sold for export, where testing was compulsory. Some 11% said positively that no cattle were being tested for abortion locally, which left 46% who didn't seem to know anything about it. Where tests had been made, up to 30% of the cattle carried the abortion organism.

Apparently the amount of attention given to children's health increases with their age. Most of the school children are examined medically; but only 51% of the groups report pre-school clinics, only 40% report well baby clinics, and only 6% report organized pre-natal education of mothers.

Under these circumstances it does not seem surprising that 26% of the groups reported stillbirths and 22% reported infant deaths, against only 14% reporting deaths of children of school age or in their teens. However, only 6% reported deaths of mothers in childbirth. Some 11% of the groups said most of the stillbirths and infant deaths they reported could have been prevented by prenatal education.

Many Rural Schools Backward

Apparently rural school conditions are still far from ideal. Good, clean toilets were reported by only 51% of the groups, mostly from places where children went to town or consolidated schools. Some others commented: "Very bad." Only 42% reported there was good drinking water in the schools, and one remarked: "No water at all." Hot lunches were reported from 26% of the 86 schools included in the survey. Only a third of these schools were known to have been inspected by public health officials in 1948. The groups either said "no" or made no comment about the others. But one complained that the local school had been visited by the health unit only once in six years.

The effects of soil deficiencies on health are recognized by some of the groups, as 9% reported disease conditions arising from deficiencies, such as goitre from lack of iodine. But 48% said there were no such troubles in their areas, and 45% gave no reply.

Most of the groups were able to give more information on health insurance than on health services. 63% reported that some local people were covered by Blue Cross hospitalization insurance, 9% reported coverage by a county co-operative, and 18% reported coverage by other agencies. In all, this represents hospitalization insurance of some sort in 91% of the districts reporting, with medical coverage in 8% and surgical in 11%. The reports showed that most of the Q.W.I. members had hospitalization insurance.

This distribution of insurance by districts gives little idea of the actual number of people covered, as figures were far from complete, and varied from 4 in one place to 200 in another. But it does show that there is a widespread consciousness in rural Quebec of a need for better health services than have been provided in the past.

The survey was not complete enough to give an accurate picture of health conditions in English-speaking rural Quebec; and the figures are for 1948, the last year for which they could be secured. But it does give quite a striking picture of public information on these points.

It reveals four major points: (a) that it is difficult for many rural people to secure needed treatment or materials; (b) that there are a great many unimmunized children who may fall prey to contagious diseases; (c) that there is still considerable danger of infection from diseased animals; and (d) that many people know practically nothing about the health conditions under which they live.

Making A Home Is A Great Art

"Building a home is one of the greatest of the creative arts," Myrle E. Kelly, head of art department, Southwestern School of Technology, Weatherford, told the 1,500 farm women attending Farm Home Conference in Stillwater, Oklahoma.

Miss Kelly said that transforming an empty house into a home is no less a creative art than changing a flat piece of canvas into a painting.

In selecting pictures to be placed in the home, Miss Kelly emphasized that the picture should add more to the decoration of the room than the space it occupies.

"Pictures," Miss Kelly said, "should vibrate the personality of the home. They should belong."

Pictures should be selected for the individual rooms and the same ones should not be on the walls the whole year. She suggested that they be rotated by seasons.

"A picture to be hung in the living room should have universal appeal," Miss Kelly said, "because it is in this room that guests and friends gather."

In answer to the question of the proper location for personal photographs, Miss Kelly said that they belong in your personal room, your bedroom. In your bedroom your personal opinion is the rule.

Picture Quality Important

"It is better to have a good print of a masterpiece than to have a poor original," Miss Kelly stated.

"Pictures no matter how beautiful, must be hung properly if they are to give their best impression," Miss Kelly said. "They should be hung flat against the wall at eye level and with as little wire showing as possible. Stairstep arrangement should be avoided except on stairways," she added.

In conclusion she said that it is better to have too few pictures in a room than to have too many.

Help Child Train Himself

Give your child a reason and you'll do a better job of teaching him to take care of his playthings. That's the advice of Mrs. Alma H. Jones, extension family relationships specialist, Iowa State College.

She explains that such commands as "Pick up your toys this instant!" or "I'm going to punish you if you don't bring those toys inside," aren't usually effective in the long run.

A reason behind a command such as, "Some of the blocks may get lost if you don't put them away," results in a positive attitude rather than a negative one on the part of the child. It increases his knowledge. The next time he may be able to reason it out for himself, Mrs. Jones explains.

Do You See What You're Doing?

by Elizabeth Loosley

There was once a very wise mountain boy who left a good factory job in the production line to go back to his modest shop in the Southern Highlands of Tennessee, because he felt he must work where "I can see what I'm a-doing". Few workers to-day can put a finger so surely on one of the great difficulties of our modern life. There aren't very many of us who can "see what we're a doing". We work at parts of processes, but we don't see the process as a whole.

Artists and Craftsmen are more fortunate than the rest of us. They can see very clearly what they are doing, because they themselves create the object every step of the way. This is the reason why people have obstinately clung to hobbies and handicrafts, in spite of the loud voices telling them that such things could be produced much better and more cheaply by machine.

In New England, with its proud, strong tradition of individualism, a famous group of "handicrafters" has grown up. Besides serving as a creative outlet for many people, handicrafts have become an economic resource of the region. The development of this whole movement is described in "Handicrafts of New England" by Allen H. Eaton.

The book itself is as beautiful as the work it describes. It is not a "how to do it" account, but a record of what is being done in New England handicrafts; the people who are doing it; and the ways in which they are marketing their products. The book is divided into the following sections: wood; basketry; spinning and weaving;

knitting, netting, lacemaking and crocheting; handmade rugs and carpets; dyeing of materials and decorating of surfaces; pottery; carving and whittling; decorative needlework, embroidery, quiltmaking; toys, dolls and miniature objects; puppets and marionettes, metalworking, silver-smithing, enameling, jewelry making, and gem-cutting; nautical handicrafts; miscellaneous handicrafts.

The illustrations are particularly fine. Only the best examples of each type of work are shown. The result is an amazingly beautiful series of photographs (several of which are in colour) of special interest to handicrafters because of the high standard of design.

Canada is beginning to develop a deservedly famous reputation for handicrafts, although Norway, Sweden and Denmark still outdistance her. Handicrafts executed at the level discussed in Mr. Eaton's book can be one of the best ways of explaining Canada and Canadian culture to the rest of the world. And secondly, such a handicraft development could give to a substantial number of Canadians a livelihood which will bring them satisfaction as well as financial return, a combination not too prevalent in our day!

Any person who has this serious interest in the development of handicrafts, may borrow "**Handicrafts of New England**" from the Information Centre, Adult Education Service, Macdonald College. It has abundant inspiration as well as practical suggestions. If these can be passed on to some of the Canadian "handicrafters", our purchase of this beautiful (but expensive!) book will be completely justified.

Hannam Refutes M.P.'s Remarks

Strong exception was taken by H. H. Hannam, president of the Canadian Federation of Agriculture, to the remarks made by Leslie Mutch, M.P., parliamentary assistant to the Minister for Veterans' Affairs, in an address to the Liberal Business Men's Club in Toronto.

Mr. Mutch was quoted as saying that the almost universal demand for some form of security was evidence of a softening of the moral fibre, a narcotic of the weak-willed, excuse of the lazy and the refuge of the coward. Mr. Mutch had classed the farmers of Canada as the second best organized of the "fear-ridden" groups, labor being the first.

In a statement issued at Ottawa, Mr. Hannam said:

"If Mr. Mutch's remarks are to be taken seriously, they exhibit a most unfortunate attitude of mind, and it is sincerely to be hoped he does not reflect the opinion of his minister or his government. His remarks envision a return to the old economic anarchy of the past, wherein every man was for himself and the devil take the hindmost.

"There may be in this modern world a minority of men who can build security for themselves by their individual effort. Mr. Mutch, I presume is one of those. And the kind of security he has obtained for himself is the same kind of security which the majority of citizens desire for themselves. Mr. Mutch's remarks take no account of the great majority of the people who have no means of building security for themselves without the assistance of national security programs in some form."

Orchard Cultivation Pays

Comparing sod against clean cultivation, it was found at the Dominion Experimental Station, Saanichton, B.C., that bearing wood is not replaced rapidly enough on mature apple and pear trees, if they are left in a sod any longer than four years and it was found that differences in yield were in favour of the clean cultivated plots.

Says Woodlot Returns Could Be Tripled

"If Nova Scotia farmers would follow sound and scientific woodlot-management practices, timberland production in Nova Scotia could very easily be tripled," says Honourable A. W. Mackenzie, Minister of Agriculture and Marketing, and of Lands and Forests.

"Good management of wooded areas, and efficient cutting of timber," continued Mr. Mackenzie, "would eliminate much of the waste that now exists, and yields could be stepped up materially without cutting a larger volume than can be grown each year. Then, too, in some areas almost 50% of the volume of some trees is being left behind in the woods, rather than hauled out and used for other purposes."

Mr. Mackenzie has several ideas on the subject of woodlot management which he feels might well be adopted by all woodlot owners. Here, for instance, are several of his "don'ts" which should be remembered by all who wish to implement a good timberland management programme:

1. Don't make your woodlands do double duty by using them for pasture. Undergrowth is destroyed and young trees eaten off.

2. Don't cut trees in your woodlot indiscriminately. Cut wisely, so new growth is coming along at all times. Cut mature trees only.

3. Don't clear marginal and sub-marginal land for use as pasture or crops. Much of this land will not give as high returns under cultivation as it would under good forest management.

4. Don't damage your remaining stand when removing mature timber. Such damage discourages reproduction and growth.

5. Don't hesitate to ask for assistance and advice regarding the reforestation of eroded land. Such land, eventually, will return a dividend. In addition, it will conserve water supplies, prevent soil erosion, maintain wild life, and provide additional recreational facilities.

More Taking to Fertilizers

Canadian farmers are using considerably more fertilizers than they did twenty years ago. Sales of fertilizers for use in Canada reached an all-time record in 1949 of 741,700 tons, compared with 672,200 in the preceding year, and 660,700 tons in the 1946-47 year. Sales in 1949 were more than double the 1940 total of 346,700 tons and more than four times the sales in 1927 of 170,000 tons.

Through the years there has been a decided change in the proportion of sales of materials and mixtures. The purchase of ready mixed fertilizers has become much more popular. In 1927 the sales of materials represented 62.1 percent of total sales, but by 1949 the figure had fallen to 17.5 percent. Sales of mixtures which in 1927 represented only 37.9 percent of sales, had risen to 82.5 percent in 1949.

"JOE BEAVER"

By Ed Nofziger and Kip Koenig



Forest Service, U. S. Department of Agriculture

"Ah—I see forests and pure water again due to wise forest management."

Cattle Market All His Hay

"Some of our farmers, at least, are not worried about hay marketing this year," reported D. E. MacPhee, agricultural representative for Cumberland County, N.S., in a recent report to Dr. W. V. Longley, Director, Extension Services. "This was called to my attention the other day when I visited the farm of Wilfred Rushton, at Rockley. Mr. Rushton operates a large farm on which he has used a considerable quantity of ground limestone and this, in turn, has led to the production of a large tonnage of hay, in addition to something around 1,700 bushels of grain last year.

This winter, Mr. Rushton has a barn full of cattle and to these he is feeding his surplus hay. All the stock is contented, comfortable, well-bedded, and in good shape.

"Mr. Rushton is strongly of the opinion that it pays him much better to dispose of his surplus hay through cattle than it would to ship it. This," reported Mr. MacPhee, "struck me as an attitude that should be far more prevalent in this country. When one goes into a barn and finds only a small number of cattle, and the farmer wanting to sell hay, one can be pretty sure that the farm is not going to be kept up very long since soil fertility cannot be maintained with limestone and commercial fertilizer, only. Instead, the feed produced on the farm should be fed to livestock and the manure applied to the land".



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

The Semi-Annual Board Meetings

by Mabel Smythe

The Semi-Annual Board Meeting of the Quebec Women's Institutes was held in the Queen's Hotel, Montreal, January 20-21.

There was an excellent attendance with only three counties marked absent at rollcall. Mrs. Chas. Smallman, Past president, and Mrs. J. D. Lang, Agriculture Conventor, were unable to attend owing to illness, but sent their best wishes to the meeting. Mrs. R. Thomson, Provincial President, was in the chair.

A telegram of greetings was read from the Hon. Laurent Barré, Minister of Agriculture, Quebec; and Mme P. C. LeBeau, Secretary, Home Economics and Handicrafts Division, Department of Agriculture, Quebec, was a welcome guest. Mme LeBeau expressed the good wishes of herself and Mr. Emile Gauthier, and congratulated the Q.W.I. in their growth in membership and branches. (There are now 102 branches and 2900 members).

It has been arranged for Miss Birch to take a course in rug-making at Quebec, and it is planned to have this craft taught at the Short Course, which will be held at Macdonald College, May 29-June 2. Mrs. Coates reported that in response to her request for Short Course suggestions, rug-making was much in demand. Miss Alice Light-hall, President, Quebec branch, Canadian Handicraft Guild, spoke eloquently on the beauty and usefulness of handmade rugs, and had brought with her some very beautiful samples of the craft, which were much admired. It is hoped that after the Short Course, a large number of members will feel like entering the Tweedsmuir Competition in 1951.

Miss Birch's report was read, showing that in the preceding six months, she had travelled 5500 miles to give courses in the branches. 612 articles had been made under her instruction; and her programme booked up to May 1950.

Miss Joy Guild gave a very interesting report of her work, and her resignation as Demonstrator-Secretary was regretfully accepted by the board.

Mrs. Thomson reported fully on her own active schedule since last June, including attendance at many meetings, and with groups which are affiliated with the Q.W.I. Branches were also visited where she gave a report of the F.W.I.C. convention, last year. It will give much pleasure to members all over the Province to know it was the unanimous wish of the board that Mrs. Thomson should

represent the Q.W.I. at the A.C.W.W. convention. This will be held in Copenhagen, Denmark, Sept. 1950.

In the Treasurer's report, it was noted that \$1025.50 had come in toward the Watt Memorial Scholarship Fund. Mrs. Thomson asked that this Fund be stressed by the Branches. As this is the one large Q.W.I. project this year, it is greatly to be hoped that the necessary remainder will be realized by June.

Mrs. Leggett reported that the rug, which was sent as a gift from the Q.W.I. to Denman College, England, was very gratefully received. Two charming letters of appreciation were read from Miss Christmas. The A.C.W.W. has arranged for an avenue of lime trees to be planted at Denman College in memory of Mrs. Watt.

The wonderful work of sending food overseas continues steadily. 84 Branches have reported to date, sending 700 parcels.

Miss Esther Kerry, President, Local Council of Women, Montreal, was another welcome guest at the Semi-Annual and expressed the pleasure of her organization in having the Q.W.I. affiliation. The Local Council of Women, supported by its affiliates, speaks with the voice of 35,000 women, and is concerned with all social problems affecting women and the nation as a whole.

Support was asked for the Canadian Association of Consumers. All counties were urged to assist the Red Cross Blood Donor Clinics, but it was felt that the W.I. branches are in no position financially to undertake school lunch programmes on their own, though, of course, every assistance must be given this worthy work.



The rug sent to Denman College as a gift from the Q.W.I.

Family Living In Quebec

Results from the A.C.W.W. survey on Family Living, as conducted by the Q.W.I. in this province, have been compiled and the findings make interesting reading. One disappointing fact emerges, however. In reply to the question, "Are there any opportunities for Adult Education?" 64% said "no," and these answering this question, remember, were Institute members! All branches plan programmes designed to make a study of subjects and events covering all aspects of W.I. objectives. If these are followed it involves talks, studies, discussions. Is this not being done, or did the members fail to realize this is Adult Education? Mention was made of Community Schools by some of the 36% that answered in the affirmative and Farm Forums and Citizens' Forums come high on the list for listening and discussion groups. Again, when asked about travelling libraries and facilities for obtaining books, 62% said no such opportunities existed. What about the book and pamphlet library at the Q.W.I. office, the McGill Travelling Library, and Information Centre, all at Macdonald College, ready and waiting to serve upon request.

In housing, the majority of the members (85%) felt there were enough homes for farm people but the greatest problem was that of remodelling as over half of those reporting had neither electricity or modern plumbing, and many of the remainder who did have lights, had no bathroom. Transport showed a little brighter picture with 78% reporting bus or train service. A few said "none but our own". All had postal service (rural delivery) and 82% phone service, ranging from "good" to "poor". (party line!)

31% reported schools in their community, the remainder, from one mile to 20 for the nearest high school. 46% felt modern education was discouraging young people from remaining on the land, one report adding, "definitely". 12% said, "to some extent", the remaining 42% said "no". The Health situation is not very rosy, most branches reporting a doctor is available but in many cases at a distance of 10 or 12 miles, often over bad roads. 64% have Maternity and Child Welfare Clinics and 87% state General and Maternity Hospitals are available. These are 18 to 36 miles away, all over-crowded and very expensive. The remaining 13% have no facilities whatever.

Opportunities for recreation in the community brought an affirmative answer from 47%, some adding "still room for improvement". Many of this number have a hall for this purpose (several mention W.I. hall) while the rest use their school. There are still, however, 53% with no such facilities. As for holidays — the illuminating fact about these replies was that the 22% who said "Yes" were branches located in a town, the farm women came out with a strong "NO", 72% of them, the other 6% said, "sometimes".

In the 6th section, conditions of work, etc., answers

showed members of the family do not work as paid helpers on the land, care of the poultry and garden being their particular task, although 20% mention field work, a few qualifying this by saying, "only in a rush season". 12 hours a day was the average period of work but for there it ran up to one answer "25!" "Women's work is never done" was often quoted.

Suggestions on ways and means of improving conditions and removing handicaps from the country women workers were invited in the closing sections of this survey. Rural electrification was spotlighted here, and lower prices for electrical appliances and equipment. Other suggestions were: stabilized and parity prices, improved markets, better sanitation, exemption from income tax for labour of family on farm, education made easier to obtain, learn to save time, and a holiday once a month. A few other observations included unemployment insurance should be made available for farm help and high wages in industry are a handicap to farmers, courses in Homemaking and Agriculture or Woodworking should be available in all our schools, and technical education for our young people and vocational guidance.

Office News

The first item this month is, of course, the resignation of our popular Demonstrator-Secretary, Miss Joy Guild. During the time she has been serving in that capacity, nearly three years, her duties have taken her to all sections of the province served by the Q.W.I. where she has gained the esteem and warm friendship of the members. She has accepted a position with the Family Herald & Weekly Star and although she will be greatly missed, all join in wishing her every success in her new field of service.

Miss Elizabeth Christmas, Warden of Denman College, has invited all delegates from the Commonwealth countries, who may be attending the A.C.W.W. Triennial Conference, to a week-end party at the former place. Mrs. R. Thomson, who will represent the Q.W.I. at that conference, has accepted the invitation and is looking forward to this opportunity of seeing something of the work being carried on at Denman, which is operated so successfully by the National Federation of Women's Institutes, England.

The Q.W.I. is offering again this year that "week away from home". Dates for the annual short course in Leadership Training have been set for May 29 to June 2. The attendance will have to be limited to the usual number, forty, but it is hoped all counties will have representatives at this annual event. Detailed information will be sent to all branches before that time.

The Month With The W.I.

18 counties reported their activities for the month of January. According to Convenors' reports, icy roads, sickness, and some cancelled meetings account for a number of branches being "among the missing."

Argenteuil: Arundel made arrangements to serve hot soup to the school children who carry lunches. They also decided to send a food parcel to a W.I. in England. Brownsburg had a very large meeting and a parade and auction of aprons netted \$21.70. A donation was made to the Cancer Society and the Children's Memorial. The members also collected clean, used linen and cotton to be used in wrapping cancer dressings. Frontier had an enjoyable meeting, at which members read items of interest culled from the newspapers. 12 scrapbooks for the Children's Hospital were handed in. Jerusalem-Bethany heard the publicity convenor give a short reading on her subject, while at Lachute the Citizenship Convenor read a paper, "Canadian Citizenship". Morin Heights held a parade and exchange of aprons, which sounds like a happy idea; while the Home Economics Convenor discussed Fair Work, and gave a summary of the 1949 Short Course. Pioneer was busy with preparations for a sale, and sent gifts to four members who were ill. Upper Lachute and East End have a new member who hails from Holland. This branch was also busy collecting linen for cancer dressings.

Beauharnois: Nitro, a quite new branch, was very busy with preparations for their first Valentine Tea. The Home Economic Convenor had prepared, and read a most interesting paper on her subject.

Bonaventure: Marcil Branch have adopted a nine year old Austrian boy and at the meeting they decided to purchase some comforts for him, including a folding cot and mattress and warm blankets. New Carlisle reports that a member prepared an article for broadcast entitled, "The Duties of a Mother — from a Teacher's Point of View." Port Daniel decided to transfer the W.I. Community Hall to the Legion, under the new name of Port Daniel Memorial Hall. A Norwegian sweater "produced" \$46.50 for Restigouche branch and the secretary's new baby received a gift from the branch. Shigawake gave the children of the community a wonderful party during the holidays, and also held a dance to raise funds.

Brome: Abercorn reports sending cards and boxes of cheer to those sick and shut-in at the Christmas season. They also donated money for hot lunches at the school. Austin also remembered the needy at Christmas, and at their meeting arranged for a card party. A special meeting was called for the purpose of tying quilts, which had been pieced for the Red Cross by one of the members. South Bolton held their meeting at the home of a new member who has recently come from Poland. They are collecting recipes for a W.I. cookbook, and linen for the Cancer



This is the Kazabazua School Project. A Saxon Village.

Society. At the Sutton meeting letters from England were read expressing the joy of the recipients over their Christmas parcels. The members enjoyed a musical programme with solos, humorous readings and various contests for which prizes were given.

Chat.-Huntingdon: Aubrey-Riverfield report one of their 1950 projects is a Recipe Book, and the members all brought in pickle recipes. \$10 was sent to the Howick High School to buy articles for the pantry shelves, and hot lunches were getting under way. An interesting paper, "The Value of Making New Year's Resolutions" was read. Dundee had as rollcall "Ways to Treat a Common Burn", and a demonstration was held on how to fill a hot-water bottle and ice-bag. Cancer was the topic of a paper read by a member. Hemmingford reports hearing an address on Newfoundland at their meeting given by the Rev. E. Bennett. \$10 was donated to the Huntingdon Hospital. The branch at Huntingdon voted \$25 for their hospital and \$4 for the T.B. Seal Fund. The Rev. W. S. Hatcher gave a talk on the Tenth Province.

Compton: Almost all the branches in this county have collected recipes for the A.C.W.W. cook book, and linen for the Cancer Society. At Bury, the older members were hostesses at the first meeting of a new Junior W.I. which was organized by the County President, Mrs. Robinson and Mrs. Kirby. This branch catered for two dances and made arrangements to have needy persons fitted with glasses. Canterbury enjoyed a rollcall, "Pay by waist measure", which proved decidedly mirth-provoking. "Denmark" was the subject chosen for study at the meeting and the usual parcel was sent overseas. East Angus reports supplying cocoa for school lunches. Donations were made to the Institute for the Blind, the March of Dimes, and Save the Children. Sawyerville enjoyed a quiz on Newfoundland, conducted by the Rev. A. Cameron. The County Secretary reported a generous donation for each of the county branches from C. D. French, M.L.A.



This picture was taken at the Kazabazua School Fair.

Gaspé: (Very bad roads in Gaspé, reports the convenor) York branch reports a successful Whist party in aid of W.I. funds, which netted \$107.85 and a Bridge from which was realized the sum of \$13. Real Christmas holly received from a former member now living in B.C. was very much appreciated. Wakeham reports their January rollcall was "A New Year's Resolution". The members collected linen for the Cancer Society and proceeds from a sale came to \$16.50.

Gatineau: (Three branches only, reporting. Again, bad weather and roads.) Eardley voted \$100 at their meeting to equip a bed in the hospital at Shawville. The bed will bear a plaque naming the donors. An essay entitled "The book I have most enjoyed", was read by a member. Rupert reports clearing \$28.60 on three parties held recently in the W.I. hall. This branch arranged to collect linen in answer to the Cancer appeal. Wakefield had an interesting rollcall, "A book I can recommend". It was reported that a special box of Christmas food had been sent to an English family. The sum of \$30 was realized on the sale of T.B. seals. The County Publicity Convenor read a paper on her work and the Rev. Wm. Lloyd gave an enjoyable talk on "Some Quirks of Human Nature."

Jacques Cartier: The members of Ste. Anne's branch collected linen for dressing covers. On the social side, they enjoyed a merry month, because at their own meeting, Mr. F. Griesbach provided instruction in folk-dancing and a film was shown, "Songs of Ireland". The ladies also spent a pleasant social evening as the invited guests of Vaudreuil-Dorion Branch in a neighbouring county.

Missisquoi: Cowansville reports that the weaving course held recently under Miss Birch's direction was much enjoyed. 15 members attended. Dunham had a demonstration on Clay-modelling given by Mrs. H. Smith of Fordyce Branch. The latter branch voted \$10 to Save the Children. They report their Tweedsmuir History has been printed and is on sale. St. Armand reported sending cards to shut-ins; and an informative paper on Newfoundland was read

at the meeting. Stanbridge East voted \$5 to the Q.W.I. Service Fund and a paper was read, "How to Attract the Birds in Winter." The members are looking forward to the weaving course.

Quebec: Valcartier reports having sent donations of money to both Protestant and Catholic schools. A very successful dance was held at the Ski Lodge and \$75 raised for the funds. Members in hospital have been remembered with visits and gifts, and the new babies in the district received presents from the branch.

Pontiac: Beechgrove had a "Surprise Box" and a guessing contest at their meeting, and a sale of fancy articles added to the funds. Bristol Busy Bees report a contest and auction sale, which was a huge success. Recipes were submitted for the A.C.W.W. cookbook, and the branch held a skating party. Elmside had a "Convenors' Field-day" with papers read on, "Forcing Rhubarb" (Agriculture) "Relaxation and the Teacher" (Education) "Painting Hints" (Home Economics) and "Publicity". Fort Coulonge reports holding a sale of home cooking in conjunction with their last meeting. A number of members from Quyon attended the cookery demonstration held in Ottawa by the Robin Hood Milling Co. This branch sent gifts to an invalid in hospital. Wyman reports an excellent showing of useful articles made by members from old materials. These were shown at the meeting and there was a parade of housedresses, "modelled by members." A paper was read on preventing waste in meal-preparation and one dealing with fruits and vegetables. Wyman, Quyon and Beechgrove all reported donations to the Canadian Institute for the Blind.

Richmond: Cleveland reports a doughnut contest at their meeting, which was much enjoyed. Naturally, prizes were given for the most "doughnutty" ones! Denison's Mills remembered a shut-in with a sunshine basket; while Gore presented two teachers in their school with magazine subscriptions. These periodicals will be of value in teaching their classes. At Spooner Pond a guest speaker gave a most interesting talk on Newfoundland, a popular subject. Richmond Hill heard a very full report on the sunshine work which had been done by the Branch in the community. Shipton Branch remembered three shut-ins with gifts and sent a parcel overseas.

Rouville: Abbotsford branch had an attendance of 26 at their last meeting which was largely given over to cultural topics. Mrs. Hay and Mrs. Coates each gave a short talk on music, while art was discussed by Mrs. Gibb and Miss Honey.

Shefford: Granby Hill reported a talk on "Plastics" at the last meeting. Mr. Arcouette of Bolta Plastics was the speaker and each member was given a plastic coat hanger as a souvenir. This branch donated \$10 to the Children's Memorial. South Roxton reported that the party held during the holidays was a great success. A contest was held at their meeting on "Best Ideas for Improving the



Ascot members at Mrs. Jas. Woodard's on Grandmothers Day.

Community". Again Newfoundland was the subject of a paper. Warden members enjoyed hearing letters of gratitude read from the folks overseas who had received parcels. The rollcall was a timely one, "Cite an important Canadian Event of 1949."

Sherbrooke: All branches in this county sent monthly overseas parcels and several collected linen for Cancer Society. Ascot branch report sending 16 baskets to sick and shut-ins. They also held a very useful miscellaneous shower for a family who had lost their home by fire. Belvidere voted \$3 to each of the following: Cancer Fund, March of Dimes, and the U.N.I.C.E.F. Brompton Road gave a Reader's Digest subscription to a patient in the Sanatorium and a disabled veteran received a subscription to Life magazine. New Canadians in the district were cheered with gifts from this branch. Cherry River reports a sale and "interesting contest" (Wonder what the contest was?) Lennoxville sent 10 baskets of good things to the sick and needy. \$5 was voted to Save the Children at the meeting and the Tenth Province was the subject of a talk. Milby held a successful food sale and a street-naming contest. \$5 was donated to the local Y.W.C.A. Orford members sang birthday greetings to two of their

members. A talk was given on Welfare and Health and the necessary items for the Home Medicine Chest. A donation was forwarded to the F.W.I.C.

Stanstead: Ayer's Cliff decided to sponsor hot lunches for school children; and established a monthly credit at the store for a needy family to June 1. Beebe is also sponsoring a hot lunch programme in the school for 65 pupils. A loom has been purchased for the member weavers in this branch and a shut-in remembered with a sunshine basket. Dixville called for suggestions on "How to raise interest in Institute work" and planned a "stork" shower for a member. At the Hatley meeting the programme was under the direction of the Home Economics Convenor. There was a button-hole contest and the winner received a potted Hyacinth bulb. Preparations were made for a party. Minton had a full report on community cheer which had been sent out by the branch to the needy and shut-ins. The rollcall was "How to make our Meetings more interesting" and a quiz was held on the W.I. Stanstead North branch reports assisting a new Canadian family who have had a hard time. They need help and friendliness. The subject of the last meeting was "This is Cotton" with a quiz on the various kinds. Way's Mills report they have been sending boxes of clothing and groceries to needy families. The shut-ins have been remembered with flowering plants.

Vaudreuil: Cavagnal Branch reports donating \$40 to be used as prizes in Home Economics and Manual Training at the High School. At the meeting a history of the W.I. was read by a member and an instructive demonstration of bandage technique given by the Health and Welfare Convenor. Two parcels were sent overseas and linen collected for the Cancer Society. Vaureuil-Dorion report a most happy social meeting to which were invited the Ste. Anne's W.I. and Les Cercle des Fermières. There was a large attendance and music and humorous readings were enjoyed by all. This branch also held a very successful party for the children during the holidays.



Mrs. Lipsey, the oldest grandmother, and Mrs. Dewing, the youngest grandmother of the group entertained by Ascot W.I.

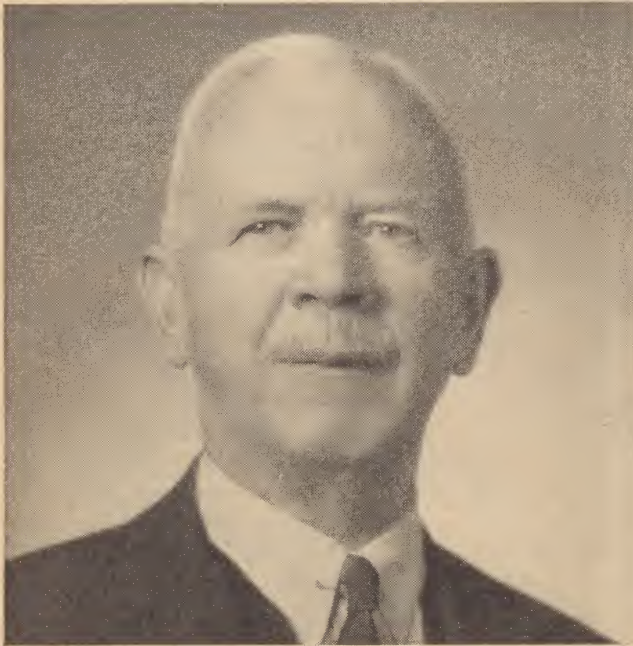


Clarendon W.I., Mrs. Vincent Hodgins, president, at left in front row.



THE COLLEGE PAGE

College Mourns A Well-loved Teacher



His watchword: "Keep smiling — a smile will go a long, long way."

Macdonald College and the neighbouring community have suffered a severe loss in the death of Eldon Coulter Irvine, M.A., B. Paed., former lecturer in mathematics in the School for Teachers. Mr. Irvine passed away at his home in Ste. Anne de Bellevue on Sunday, February 26, 1950.

When he was appointed to the staff in 1928, he was recommended by the late Dr. Parmelee as the outstanding teacher of mathematics in the province. In addition, Dr. Harrison, the Principal of the College at that time, believed that the Irvine family would be an acquisition to the musical life of the community, a belief which time has proved well-founded.

Born and educated in Ontario, Mr. Irvine obtained his Bachelor's and Master's degrees from Toronto University, and his professional training as a teacher at Stratford and Toronto. Later he received his High School Diploma in Quebec.

His teaching experience was broad and comprehensive, for he had served as a rural teacher, a mathematics specialist, and as principal-superintendent in such schools as Stanstead, Sherbrooke, and St. Lambert.

Interested always in young people, he enjoyed being a Cadet Corps instructor in High Schools; and when the first World War broke out, he served overseas with the Canadian Army, reaching the rank of Major and specializing in signalling instruction. After the fighting was over, he served as lecturer in mathematics in the Khaki College before returning to Canada.

His former students held him in the highest respect and esteem. They never applied to him for help in vain. In fact, he was affectionately known as "Daddy Irvine" because of his fatherly interest in all aspects of their life and work.

Though a noted and efficient lecturer, he never ceased to be a student himself. He undertook the summer course at Toronto University which led to his Bachelor of Pedagogy degree (B. Paed.). Furthermore, at the time of his retirement from active teaching in 1942, he had also passed all the examinations for his Doctor's degree in Pedagogy, but had not written his thesis. Perhaps his insistence on continuing his own studies was the secret of his teaching success.

The length and efficiency of his teaching career, his patriotic war service, his activities in the Provincial Association of Protestant Teachers, his terms as mathematics examiner for the High School Leaving Certificate, all must have been taken into account when he was awarded the second degree of the Order of Scholastic Merit, with the Diploma of Great Merit and the Silver Medal of the Order in 1933.

He was for many years an elder in the Union Church at Ste. Annes, where Mrs. Irvine has long served as organist.

A loyal colleague, a staunch friend, a patriotic citizen, an effective teacher, and a gentleman of high principles, he has left the record of an unselfish and useful life, and will be widely mourned and missed throughout the Province of Quebec. The deepest sympathy is extended to his widow and his two daughters, all of whom live in Ste. Annes.

Highlights of the Royal in Pictures



(1) The School for Teachers' booth in the exhibition hall contrasted present day school buildings and equipment with those of a generation ago. (2) Students of the School of Household Science modelled dresses designed and made by themselves and (7) gave demonstrations of meal preparation and sandwich-making. (3) A lighter touch was provided by the "Magnus Homo Sapiens" race, when teams from each of the years in Agriculture competed to see which could pull a sleigh loaded with co-eds fastest. (4) A general view of the Women's Gymnasium, showing the arrangement of the booths. (5) Students of the Plant Pathology option prepared the exhibit which, in the opinion of the judges, best illustrated how science can lead to better living. (6) Deputy Minister of Agriculture Rene Trepanier acted as judge for the Ayrshire classes. (8) The Horticulture students arranged displays of flowering bulbs, vegetables, and organized a seed-guessing contest. (9) The Royal was officially opened by the Principal of the Nova Scotia Agricultural College, Kenneth Cox. The chairman of the Royal committee, to whom fell most of the responsibility for organization, was J. D. McKechnie, fourth year student in Animal Husbandry, who can be seen just to the right of Mr. Cox.

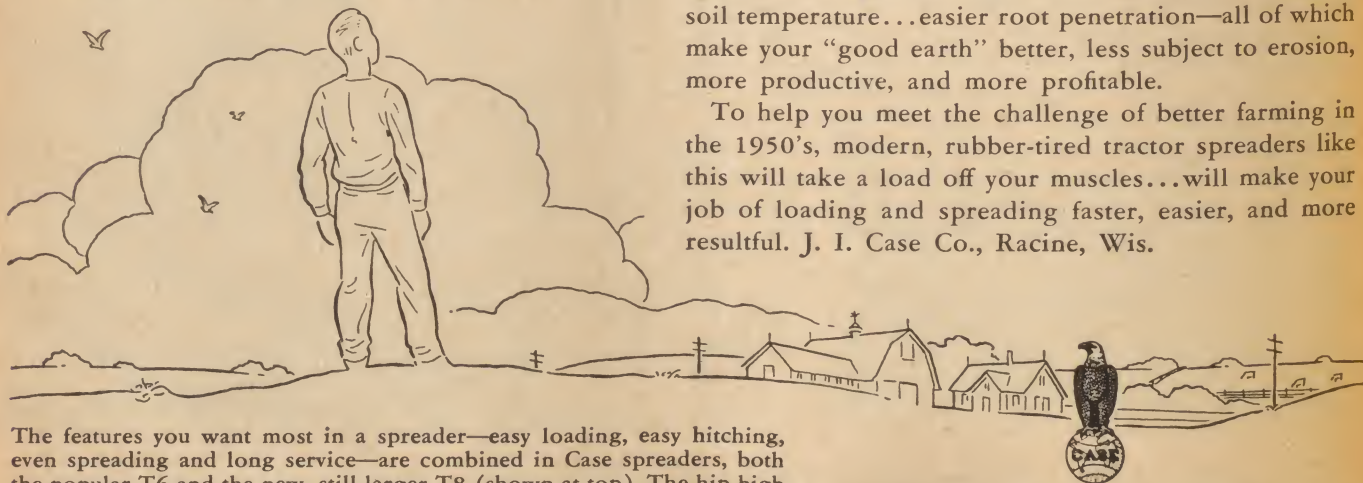


ANOTHER CHALLENGE to Farming in the 1950's

● Never underestimate the value of manure in livestock farming. Ten years from now, when you tear the last calendar page from the decade of the 1950's, the size of your bank account may well be determined by the tonnage of manure you have spread on your farm.

For manure is truly a "magic" fertilizer. Well managed, it can return to the soil 75% of the plant foods that nourished your crops. Even more important, it can put new life into your land by adding organic matter for better tilth...greater water - holding capacity...higher soil temperature...easier root penetration—all of which make your "good earth" better, less subject to erosion, more productive, and more profitable.

To help you meet the challenge of better farming in the 1950's, modern, rubber-tired tractor spreaders like this will take a load off your muscles...will make your job of loading and spreading faster, easier, and more resultful. J. I. Case Co., Racine, Wis.



The features you want most in a spreader—easy loading, easy hitching, even spreading and long service—are combined in Case spreaders, both the popular T6 and the new, still larger T8 (shown at top). The hip-high box takes some of the lift out of loading; the self-raising hitch takes *all* of the lift out of hitching, allows tractor a running start during get-away. Steady apron travel gives even spread; beaters and widespread give thorough shredding. Like *all* Case equipment, both spreaders are built for many years of good service.



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